1/58

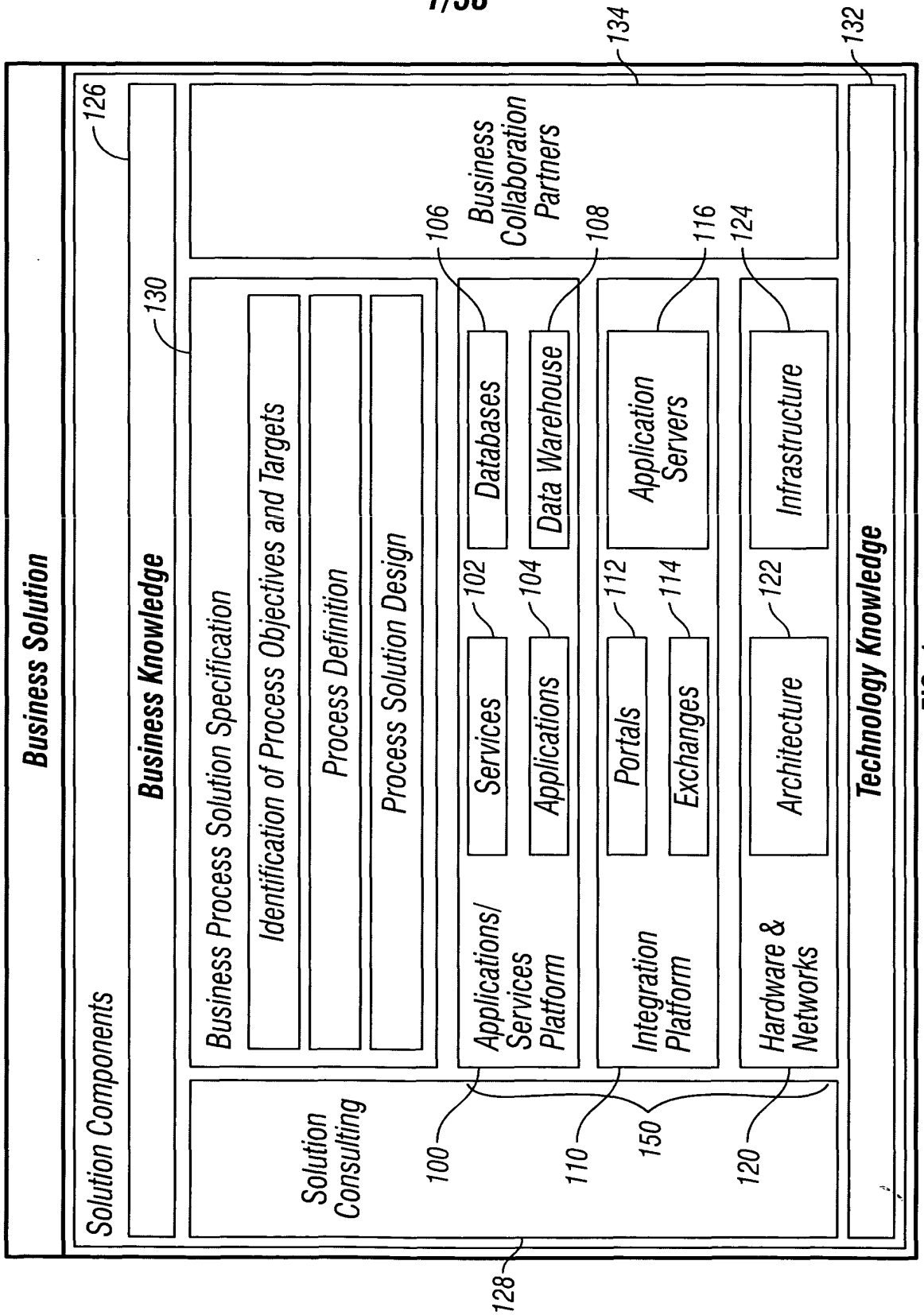
Business Solution
Solution Components
126
Business Knowledge
130
Business Process Solution Specification
Identification of Process Objectives and Targets
Process Definition
Process Solution Design
Business Collaboration Partners
106
134
108
116
124
132
Databases
Data Warehouse
Application Servers
Infrastructure
Services
Applications
Portals
Exchanges
Architecture
102
104
112
114
122
Solution Consulting
Applications/ Services Platform
Integration Platform
Hardware & Networks
Technology Knowledge
100
110
150
120
128

FIG. 1

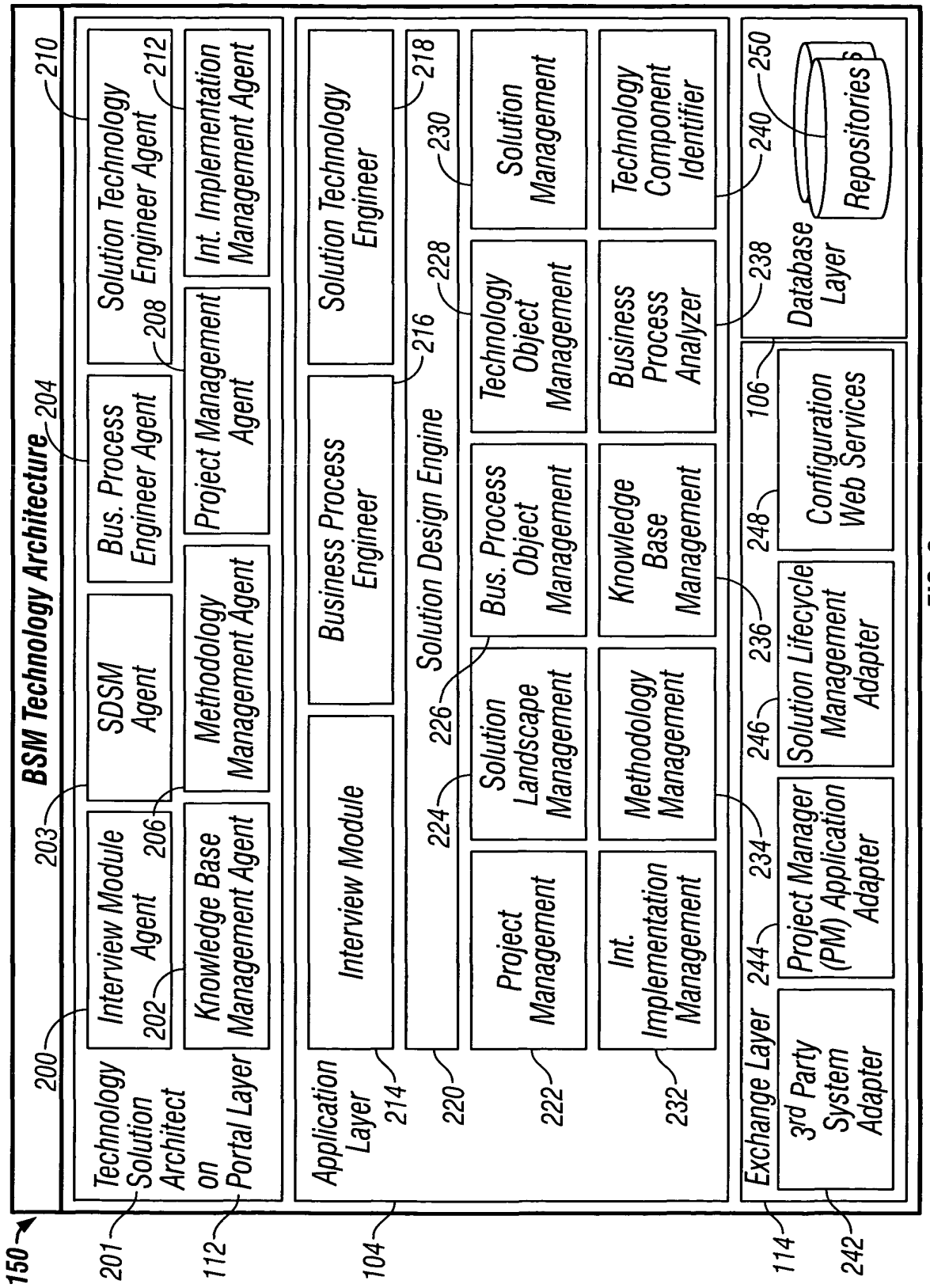
150
BSM Technology Architecture
210
200
203
204
Technology Solution Architect on Portal Layer
201
112
Interview Module Agent
202
206
SDSM Agent
Bus. Process Engineer Agent
208
Solution Technology Engineer Agent
212
Knowledge Base Management Agent
Methodology Management Agent
Project Management Agent
Int. Implementation Management Agent
Application Layer
214
104
Interview Module
Business Process Engineer
216
Solution Technology Engineer
218
220
Solution Design Engine
224
226
228
230
Project Management
Solution Landscape Management
Bus. Process Object Management
Technology Object Management
Solution Management
232
Int. Implementation Management
Methodology Management
Knowledge Base Management
Business Process Analyzer
238
Technology Component Identifier
240
Database Layer
250
Repositories
Exchange Layer
114
242
244
234
246
236
106
248
3rd Party System Adapter
Project Manager (PM) Application Adapter
Solution Lifecycle Management Adapter
Configuration Web Services

FIG. 2

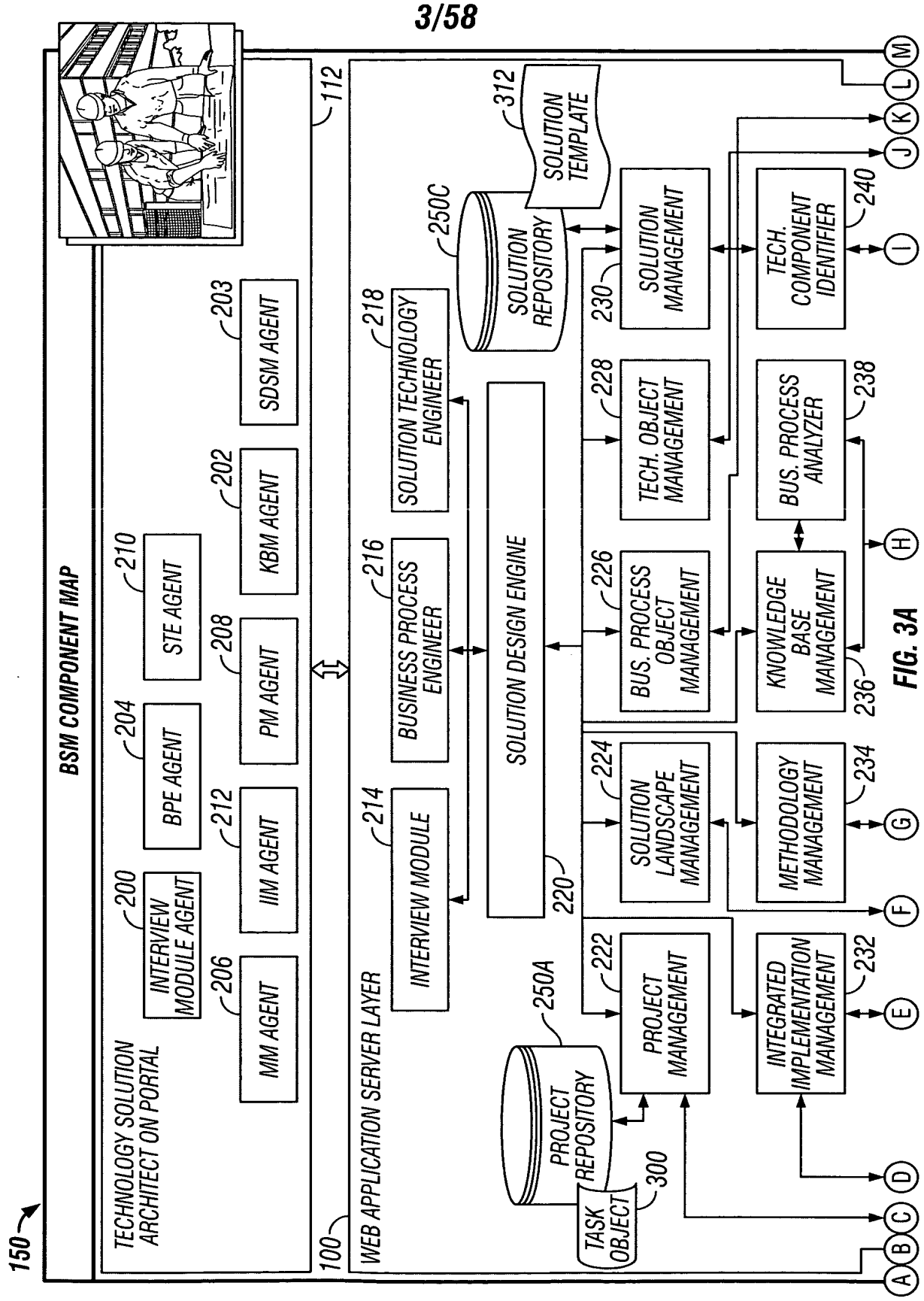
150
BSM COMPONENT MAP
TECHNOLOGY SOLUTION ARCHITECT ON PORTAL
INTERVIEW MODULE AGENT
200
BPE AGENT
204
STE AGENT
210
MM AGENT
206
IIM AGENT
212
PM AGENT
208
KBM AGENT
202
SDSM AGENT
203
112
WEB APPLICATION SERVER LAYER
INTERVIEW MODULE
214
BUSINESS PROCESS ENGINEER
216
SOLUTION TECHNOLOGY ENGINEER
218
SOLUTION DESIGN ENGINE
220
SOLUTION REPOSITORY
250C
SOLUTION TEMPLATE
312
SOLUTION MANAGEMENT
230
TECH. COMPONENT IDENTIFIER
240
TECH. OBJECT MANAGEMENT
228
BUS. PROCESS ANALYZER
238
BUS. PROCESS OBJECT MANAGEMENT
226
KNOWLEDGE BASE MANAGEMENT
236
SOLUTION LANDSCAPE MANAGEMENT
224
METHODOLOGY MANAGEMENT
234
PROJECT REPOSITORY
250A
PROJECT MANAGEMENT
222
INTEGRATED IMPLEMENTATION MANAGEMENT
232
TASK OBJECT
300
100
A
B
C
D
E
F
G
H
I
J
K
L
M

FIG. 3A

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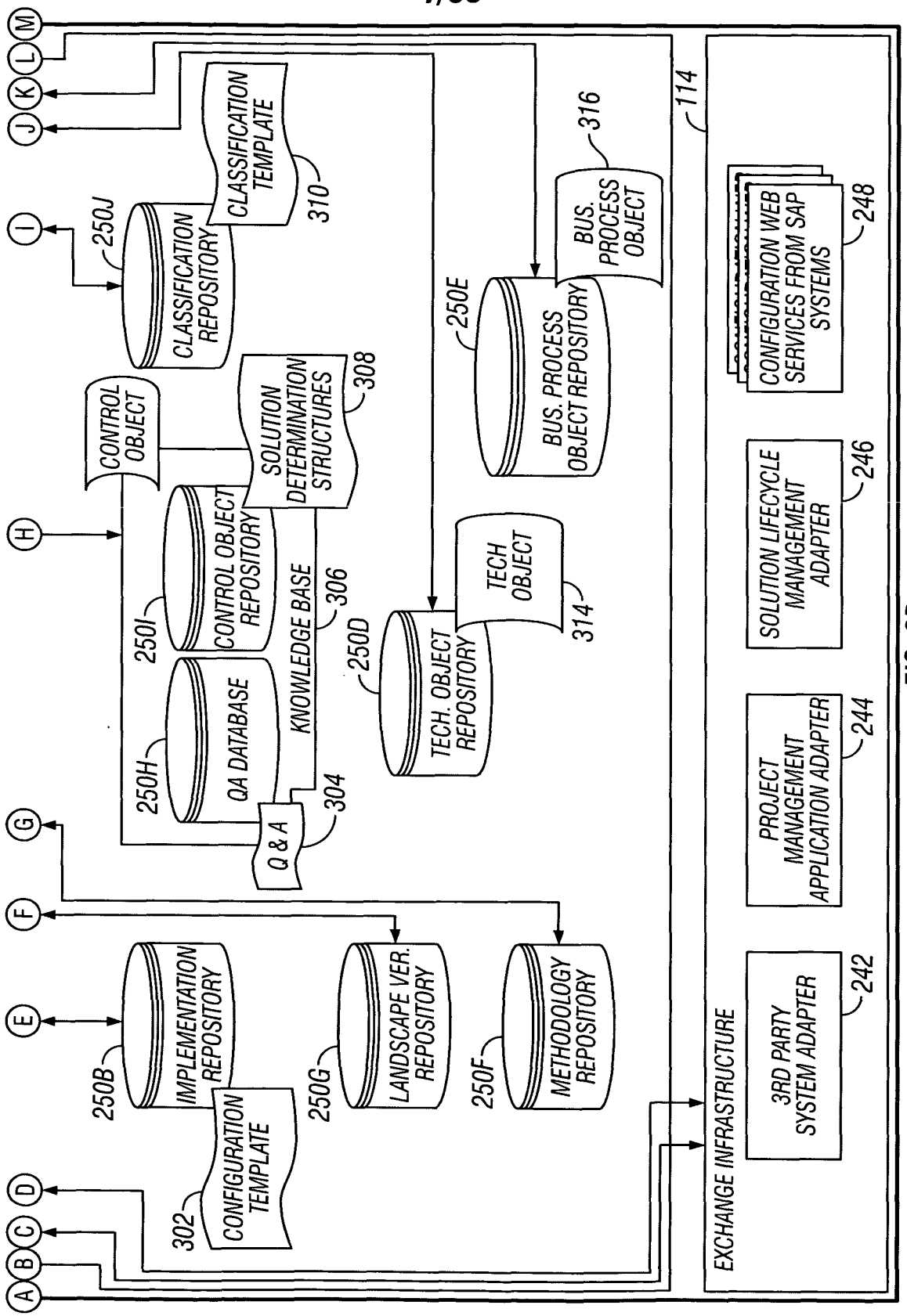
A
B
C
D
E
F
G
H
I
J
K
L
M
CONFIGURATION TEMPLATE
302
IMPLEMENTATION REPOSITORY
250B
LANDSCAPE VER. REPOSITORY
250G
METHODOLOGY REPOSITORY
250F
Q & A
304
QA DATABASE
250H
KNOWLEDGE BASE
306
CONTROL OBJECT REPOSITORY
250I
CONTROL OBJECT
SOLUTION DETERMINATION STRUCTURES
308
CLASSIFICATION REPOSITORY
250J
CLASSIFICATION TEMPLATE
310
TECH. OBJECT REPOSITORY
250D
TECH OBJECT
314
BUS. PROCESS OBJECT REPOSITORY
250E
BUS. PROCESS OBJECT
316
114
EXCHANGE INFRASTRUCTURE
3RD PARTY SYSTEM ADAPTER
242
PROJECT MANAGEMENT APPLICATION ADAPTER
244
SOLUTION LIFECYCLE MANAGEMENT ADAPTER
246
CONFIGURATION WEB SERVICES FROM SAP SYSTEMS
248

FIG. 3B

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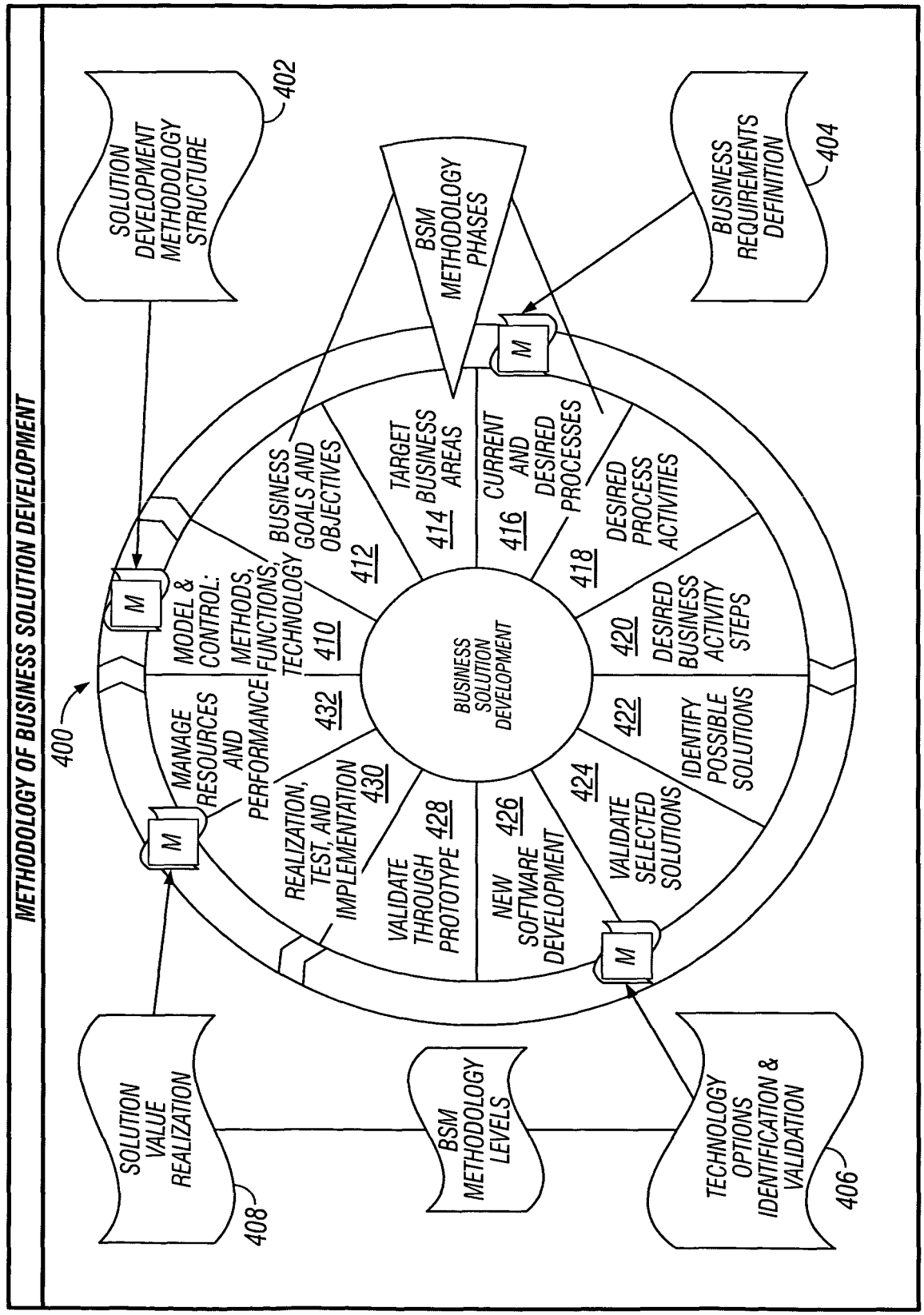
METHODOLOGY OF BUSINESS SOLUTION DEVELOPMENT
400
SOLUTION DEVELOPMENT METHODOLOGY STRUCTURE
402
BSM METHODOLOGY PHASES
BUSINESS REQUIREMENTS DEFINITION
404
SOLUTION VALUE REALIZATION
408
BSM METHODOLOGY LEVELS
TECHNOLOGY OPTIONS IDENTIFICATION & VALIDATION
406
BUSINESS SOLUTION DEVELOPMENT
MODEL & CONTROL: METHODS, FUNCTIONS, TECHNOLOGY 410
BUSINESS GOALS AND OBJECTIVES 412
TARGET BUSINESS AREAS 414
CURRENT AND DESIRED PROCESSES 416
DESIRED PROCESS ACTIVITIES 418
DESIRED BUSINESS ACTIVITY STEPS 420
IDENTIFY POSSIBLE SOLUTIONS 422
VALIDATE SELECTED SOLUTIONS 424
NEW SOFTWARE DEVELOPMENT 426
VALIDATE THROUGH PROTOTYPE 428
REALIZATION, TEST, AND IMPLEMENTATION 430
MANAGE RESOURCES AND PERFORMANCE 432
M

FIG. 4

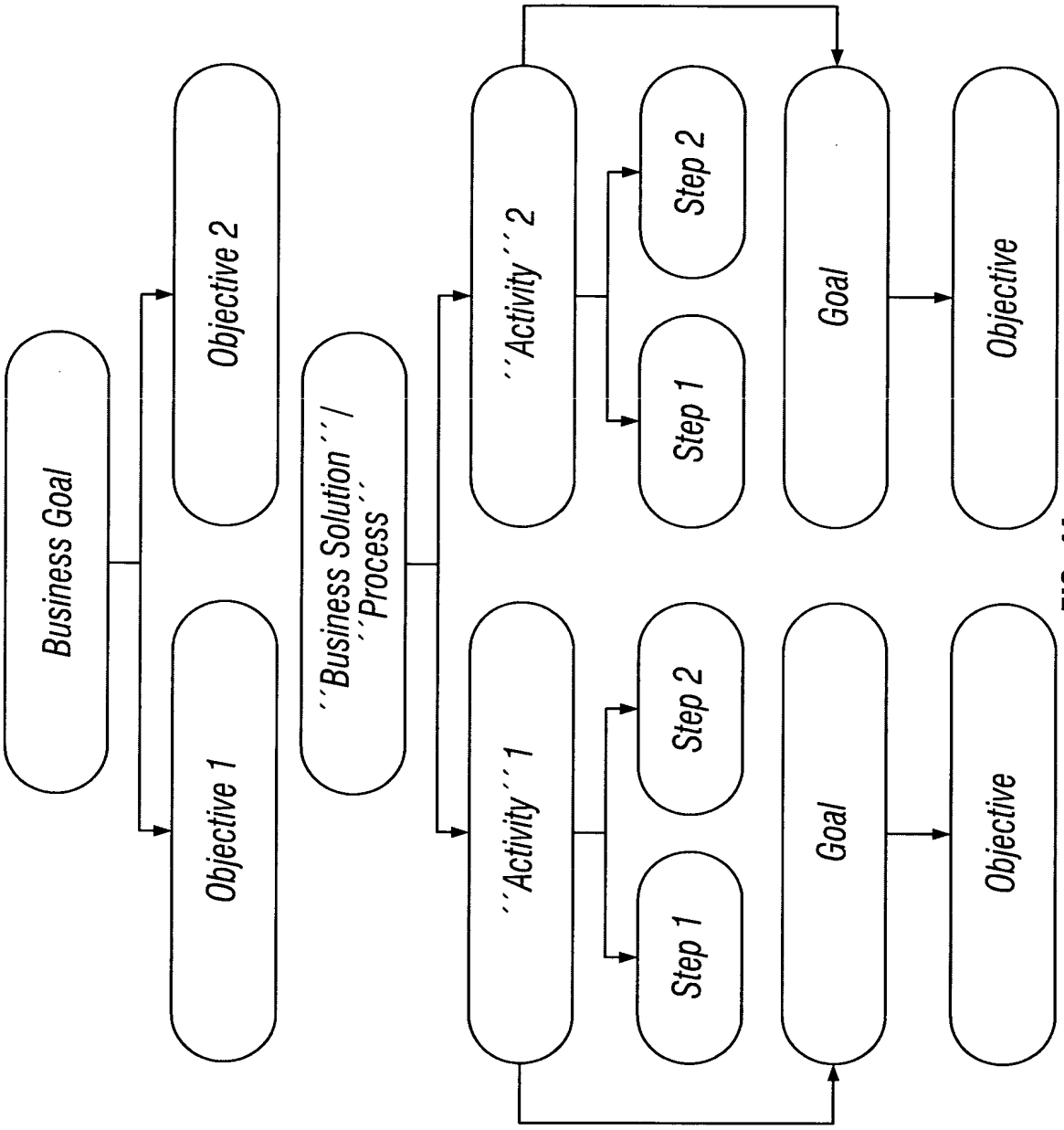
Business Goal
Objective 2
Objective 1
''Business Solution'' / ''Process''
''Activity'' 2
Step 2
Step 1
''Activity'' 1
Step 2
Step 1
Goal
Goal
Objective
Objective

FIG. 4A

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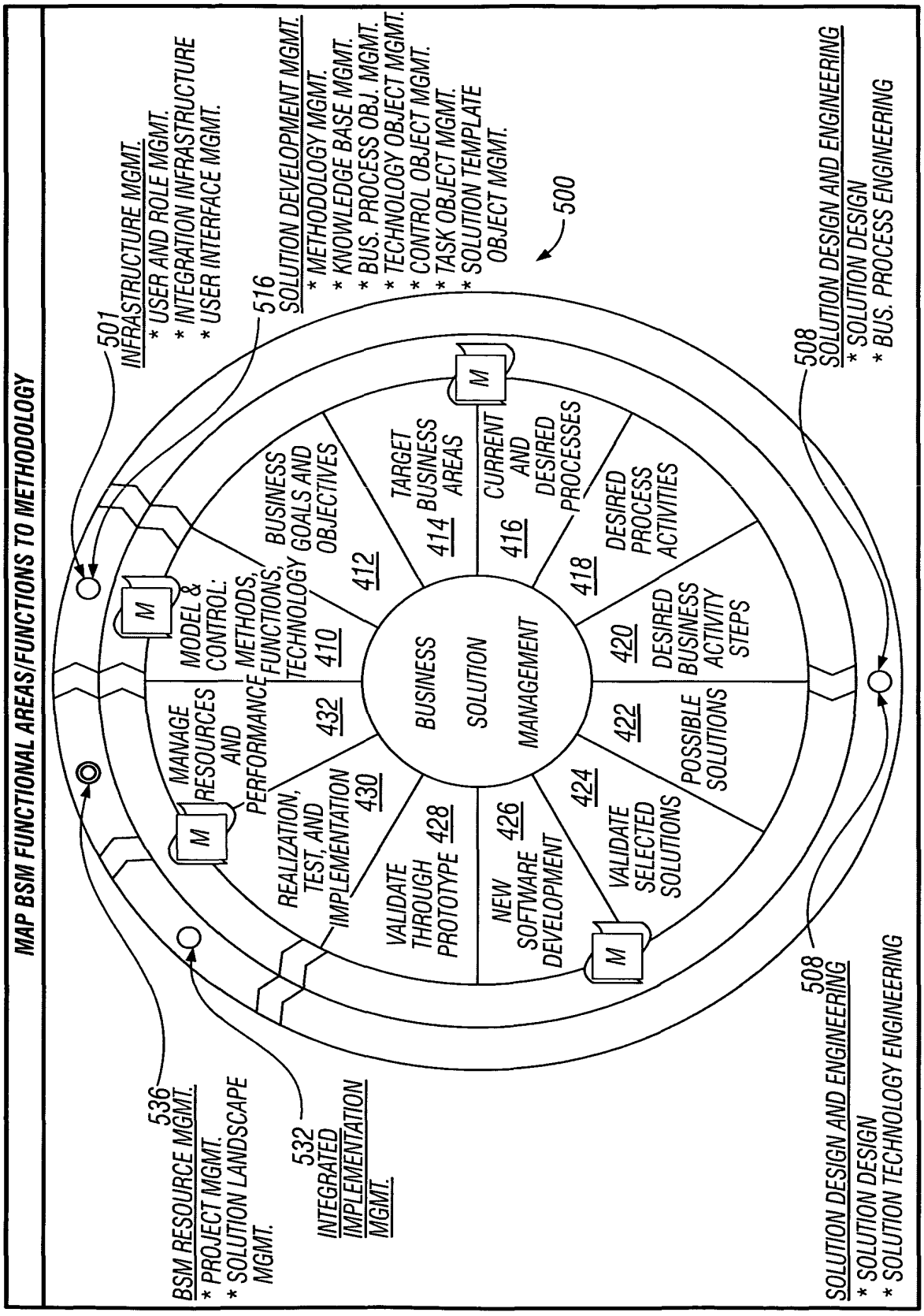
MAP BSM FUNCTIONAL AREAS/FUNCTIONS TO METHODOLOGY
BUSINESS SOLUTION MANAGEMENT
500
501 INFRASTRUCTURE MGMT.
* USER AND ROLE MGMT.
* INTEGRATION INFRASTRUCTURE
* USER INTERFACE MGMT.
516 SOLUTION DEVELOPMENT MGMT.
* METHODOLOGY MGMT.
* KNOWLEDGE BASE MGMT.
* BUS. PROCESS OBJ. MGMT.
* TECHNOLOGY OBJECT MGMT.
* CONTROL OBJECT MGMT.
* TASK OBJECT MGMT.
* SOLUTION TEMPLATE OBJECT MGMT.
508 SOLUTION DESIGN AND ENGINEERING
* SOLUTION DESIGN
* BUS. PROCESS ENGINEERING
508 SOLUTION DESIGN AND ENGINEERING
* SOLUTION DESIGN
* SOLUTION TECHNOLOGY ENGINEERING
536 BSM RESOURCE MGMT.
* PROJECT MGMT.
* SOLUTION LANDSCAPE MGMT.
532 INTEGRATED IMPLEMENTATION MGMT.
M
MODEL & CONTROL: METHODS, FUNCTIONS, TECHNOLOGY 410
BUSINESS GOALS AND OBJECTIVES 412
TARGET BUSINESS AREAS 414
CURRENT AND DESIRED PROCESSES 416
DESIRED PROCESS ACTIVITIES 418
DESIRED BUSINESS ACTIVITY STEPS 420
POSSIBLE SOLUTIONS 422
VALIDATE SELECTED SOLUTIONS 424
NEW SOFTWARE DEVELOPMENT 426
VALIDATE THROUGH PROTOTYPE 428
REALIZATION, TEST, AND IMPLEMENTATION 430
MANAGE RESOURCES AND PERFORMANCE 432

FIG. 5A

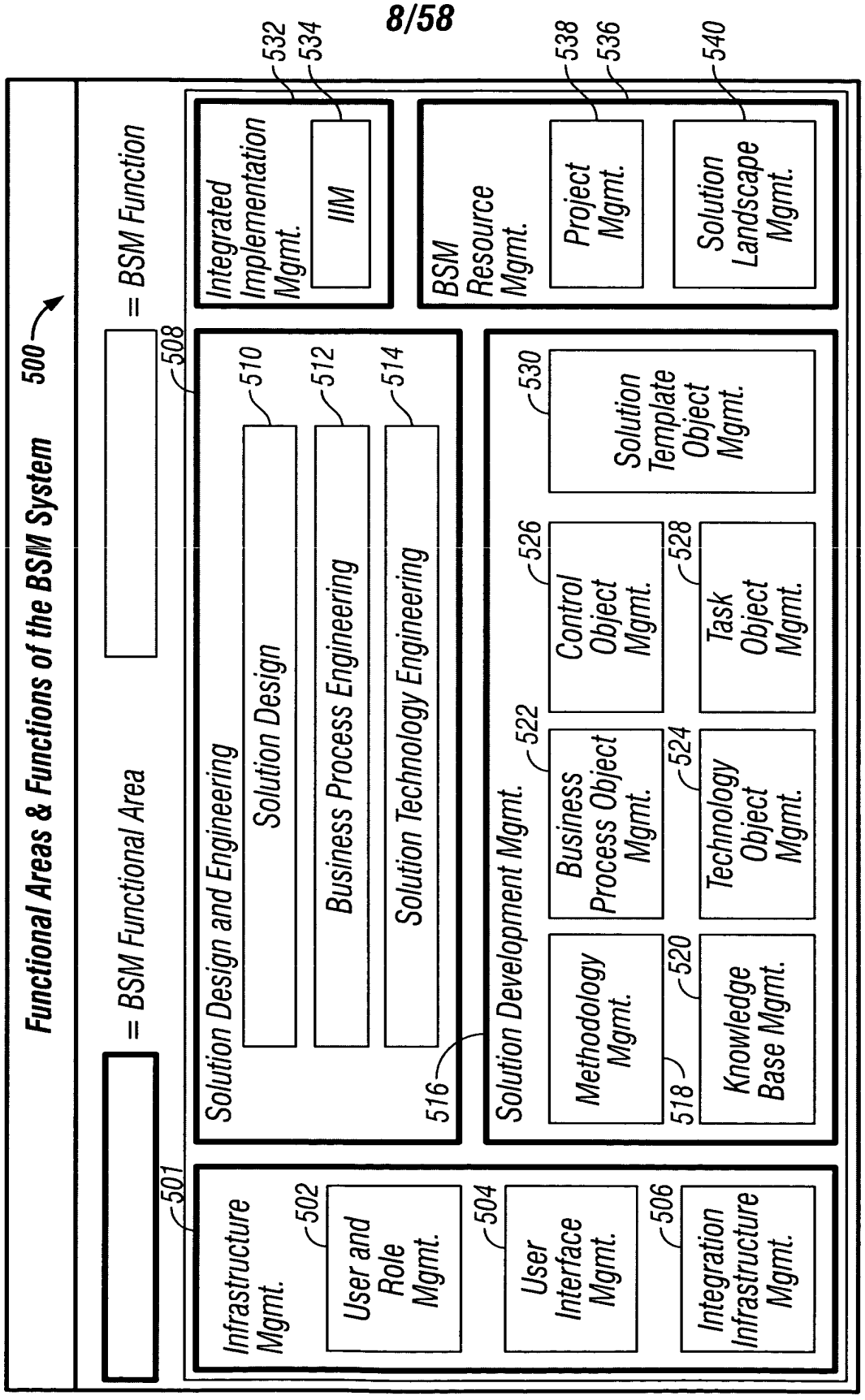
Functional Areas & Functions of the BSM System
500
= BSM Functional Area
= BSM Function
501
508
Infrastructure Mgmt.
502
User and Role Mgmt.
504
User Interface Mgmt.
506
Integration Infrastructure Mgmt.
Solution Design and Engineering
510
Solution Design
512
Business Process Engineering
514
Solution Technology Engineering
516
Solution Development Mgmt.
518
Methodology Mgmt.
520
Knowledge Base Mgmt.
522
Business Process Object Mgmt.
524
Technology Object Mgmt.
526
Control Object Mgmt.
528
Task Object Mgmt.
530
Solution Template Object Mgmt.
Integrated Implementation Mgmt.
532
IIM
534
BSM Resource Mgmt.
536
Project Mgmt.
538
Solution Landscape Mgmt.
540

FIG. 5B

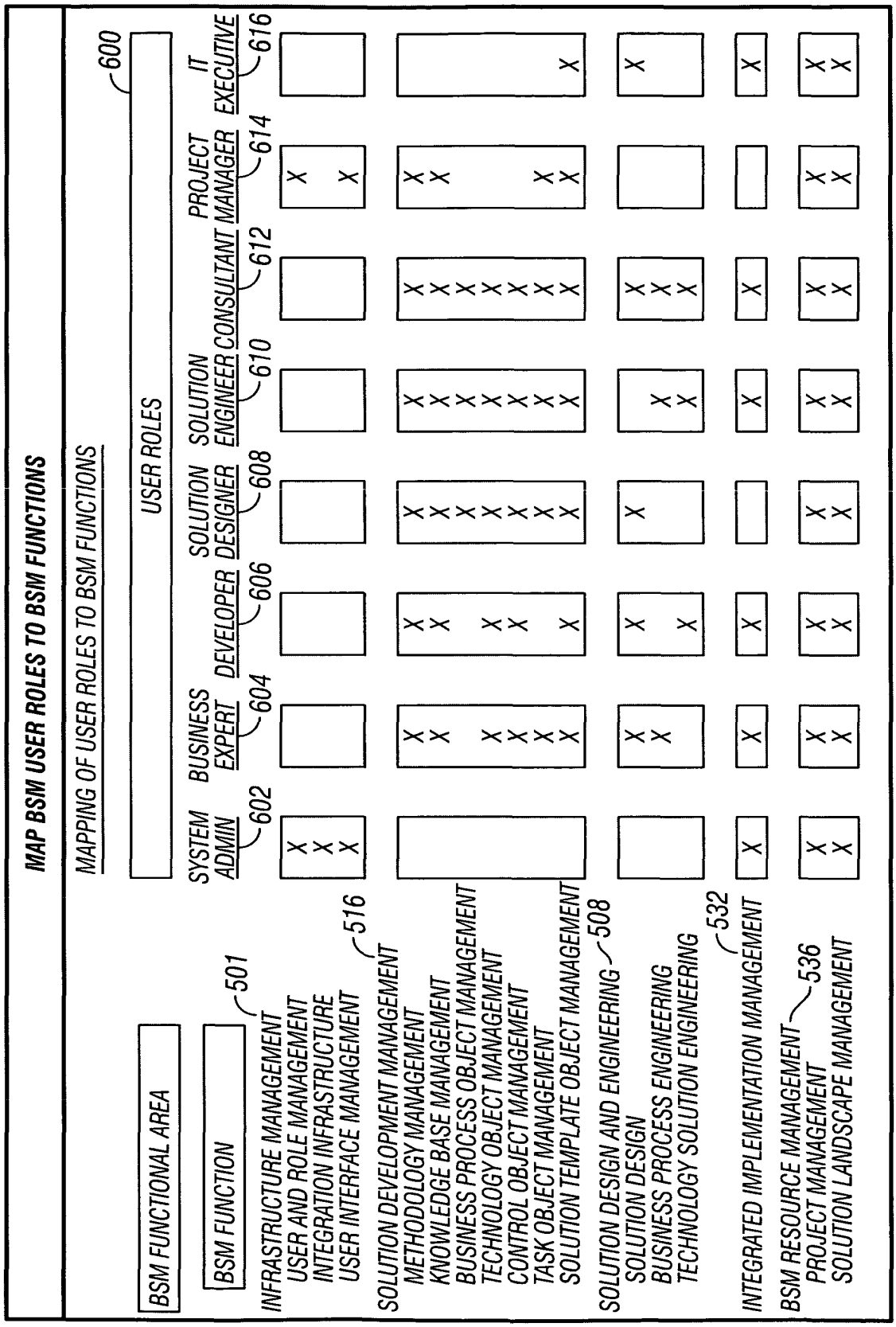
MAP BSM USER ROLES TO BSM FUNCTIONS
MAPPING OF USER ROLES TO BSM FUNCTIONS
600
BSM FUNCTIONAL AREA
USER ROLES
BSM FUNCTION
501
SYSTEM ADMIN 602
BUSINESS EXPERT 604
DEVELOPER 606
SOLUTION DESIGNER 608
SOLUTION ENGINEER 610
CONSULTANT 612
PROJECT MANAGER 614
IT EXECUTIVE 616
INFRASTRUCTURE MANAGEMENT
USER AND ROLE MANAGEMENT
INTEGRATION INFRASTRUCTURE
USER INTERFACE MANAGEMENT
516
SOLUTION DEVELOPMENT MANAGEMENT
METHODOLOGY MANAGEMENT
KNOWLEDGE BASE MANAGEMENT
BUSINESS PROCESS OBJECT MANAGEMENT
TECHNOLOGY OBJECT MANAGEMENT
CONTROL OBJECT MANAGEMENT
TASK OBJECT MANAGEMENT
SOLUTION TEMPLATE OBJECT MANAGEMENT
508
SOLUTION DESIGN AND ENGINEERING
SOLUTION DESIGN
BUSINESS PROCESS ENGINEERING
TECHNOLOGY SOLUTION ENGINEERING
532
INTEGRATED IMPLEMENTATION MANAGEMENT
BSM RESOURCE MANAGEMENT
536
PROJECT MANAGEMENT
SOLUTION LANDSCAPE MANAGEMENT

FIG. 6

700

USER MODEL FOR COLLABORATIVE REQUIREMENTS PLANNING SCENARIO

FOR SUPPLIER: BEST PC MANUFACTURERS
FOR PRODUCT: B159753 MOTHERBOARD W/ P4 @2 GHz
LEGEND:
A = ACTUAL
CI = CUSTOMER'S DEMAND FORECAST INPUT
CF = CUSTOMER'S FORMULA
DR = DERIVED RESULT
SF = SUPPLIER'S FORMULA
SI = SUPPLIER'S RESPONSE INPUT

	CURRENT PERIOD-SEP.01			NEXT PERIOD-OCT.01		
	PLAN OF RECORD		CURRENT PROPOSAL	PLAN OF RECORD		CURRENT PROPOSAL
AVAILABILITY:						
PERIOD BEG. INVENTORY	150	A	150	200	DR	219
PERIOD PRODUCTION						
NEW PRODUCTION	1600	SI	1750	1350	SI	
LESS UNAVAILABLE FOR SALE	(200)	SF	(219)	(169)	SF	(169)
NET RETURNS RELEASED FROM QA	14	SF	16	14	SF	16
PROJECTED AVAILABILITY FOR REVENUE	1564	DR	1697	1396	DR	1416
DEMAND:						
PERIOD BEG. BACKLOG	125	A	125	30	A	190
PERIOD DEMAND						
NEW DEMAND	1500	CI	1800	1675	CI	
CANCELLATIONS	(15)	CF	(18)	(17)	CF	(17)
RETURNS	(16)	CF	(19)	(17)	CF	(18)
PROJECTED DEMAND FOR REVENUE	1594	DR	1888	1672	DR	1830
PROJECTED CONSTRAINED REVENUE FCST	1564		1697	1396		1416
PERIOD ENDING:						
BACKLOG	30	DR	190	276	DR	415
INVENTORY	200	DR	219	169	DR	169

REF. METHODOLOGY SECTION 3.1

FIG. 7A

700

USER MODEL FOR COLLABORATIVE REQUIREMENTS PLANNING SCENARIO

FOR SUPPLIER: BEST PC MANUFACTURERS
FOR PRODUCT: B159753 MOTHERBOARD W/ P4 @2 GHz
LEGEND:
A = ACTUAL
CI = CUSTOMER'S DEMAND FORECAST INPUT
CF = CUSTOMER'S FORMULA
DR = DERIVED RESULT
SF = SUPPLIER'S FORMULA
SI = SUPPLIER'S RESPONSE INPUT

	NEXT PERIOD-NOV.01			NEXT PERIOD-DEC.01		
AVAILABILITY:	PLAN OF RECORD		CURRENT PROPOSAL	PLAN OF RECORD		CURRENT PROPOSAL
PERIOD BEG. INVENTORY	169	DR	169	178	DR	178
PERIOD PRODUCTION						
NEW PRODUCTION	1425	SI		1275	SI	
LESS UNAVAILABLE FOR SALE	(178)	SF	(178)	(159)	SF	(159)
NET RETURNS RELEASED FROM QA	14	SF	15	14	SF	15
PROJECTED AVAILABILITY FOR REVENUE	1430	DR	1431	1308	DR	1309
DEMAND:						
PERIOD BEG. BACKLOG	276	A	415	216	A	352
PERIOD DEMAND						
NEW DEMAND	1400	CI		1475	CI	
CANCELLATIONS	(14)	CF	(14)	(15)	CF	(15)
RETURNS	(17)	CF	(18)	(17)	CF	(18)
PROJECTED DEMAND FOR REVENUE	1645	DR	1783	1659	DR	1794
PROJECTED CONSTRAINED REVENUE FCST	1430		1431	1308		1309
PERIOD ENDING:						
BACKLOG	216	DR	352	351	DR	485
INVENTORY	178	DR	178	159	DR	159

REF. METHODOLOGY SECTION 3.1

FIG. 7B

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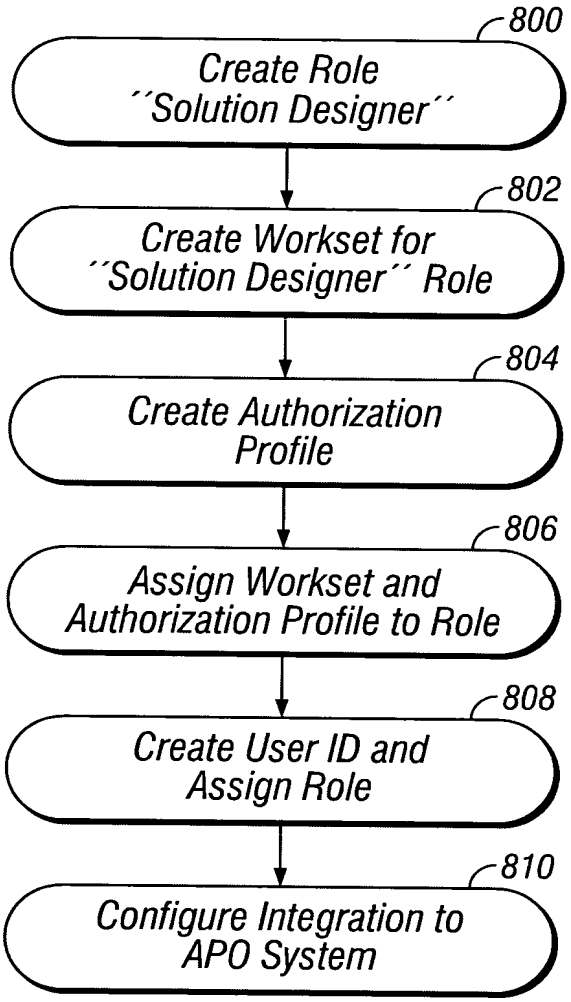
800
Create Role ''Solution Designer''
802
Create Workset for ''Solution Designer'' Role
804
Create Authorization Profile
806
Assign Workset and Authorization Profile to Role
808
Create User ID and Assign Role
810
Configure Integration to APO System

FIG. 8

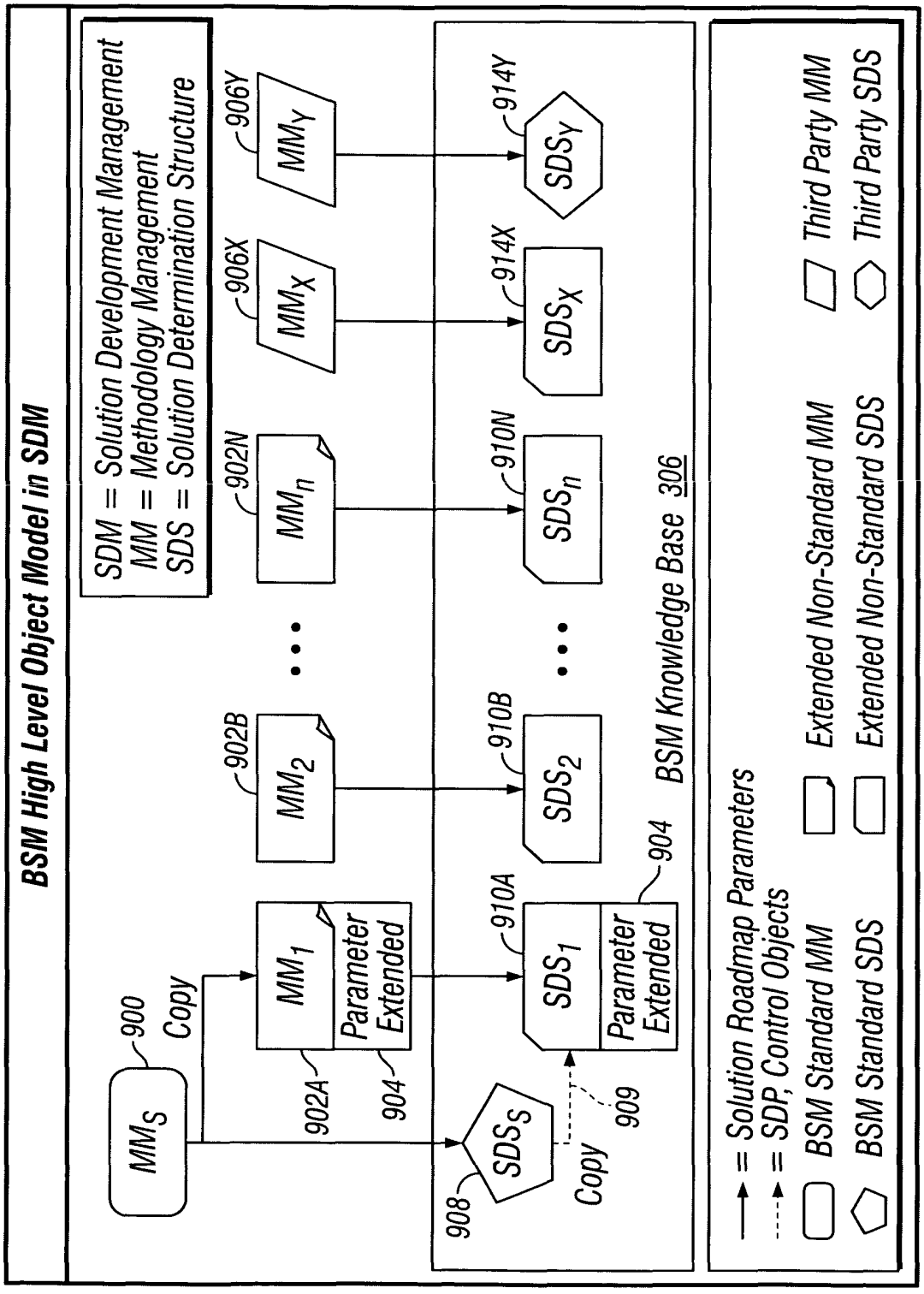
BSM High Level Object Model in SDM
SDM = Solution Development Management
MM = Methodology Management
SDS = Solution Determination Structure
900
Copy
MMS
902A
MM1
Parameter Extended
904
902B
MM2
902N
MMn
906X
MMX
906Y
MMY
908
SDSS
Copy
909
910A
SDS1
Parameter Extended
904
910B
SDS2
910N
SDSn
914X
SDSX
914Y
SDSY
BSM Knowledge Base 306
= Solution Roadmap Parameters
= SDP, Control Objects
BSM Standard MM
Extended Non-Standard MM
Third Party MM
BSM Standard SDS
Extended Non-Standard SDS
Third Party SDS

FIG. 9

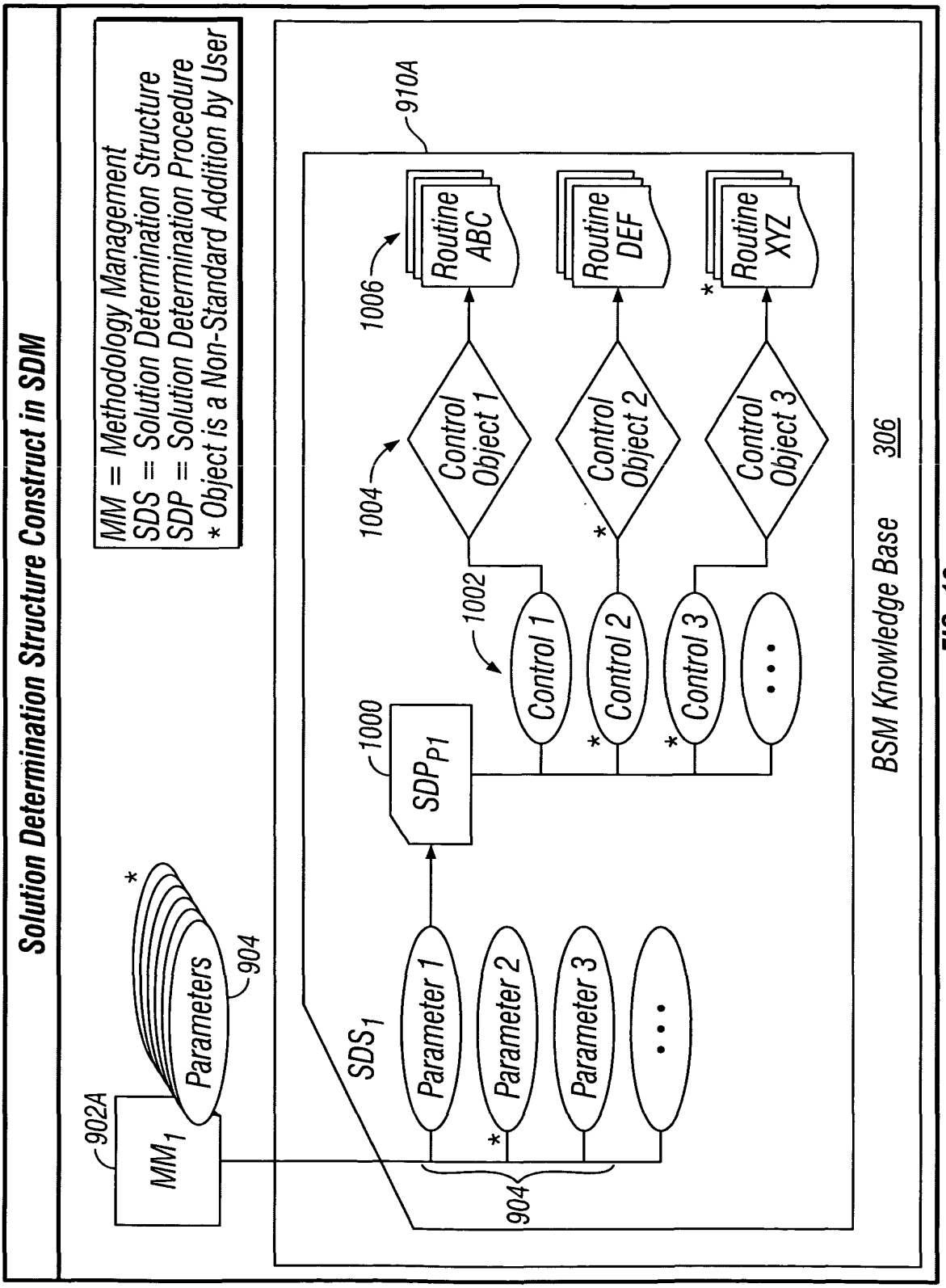
Solution Determination Structure Construct in SDM
MM = Methodology Management
SDS = Solution Determination Structure
SDP = Solution Determination Procedure
* Object is a Non-Standard Addition by User
BSM Knowledge Base 306
910A
1006
Routine ABC
Routine DEF
Routine XYZ
1004
Control Object 1
Control Object 2
Control Object 3
1002
Control 1
Control 2
Control 3
1000
SDP P1
SDS 1
Parameter 1
Parameter 2
Parameter 3
904
902A
MM 1
Parameters
904

FIG. 10

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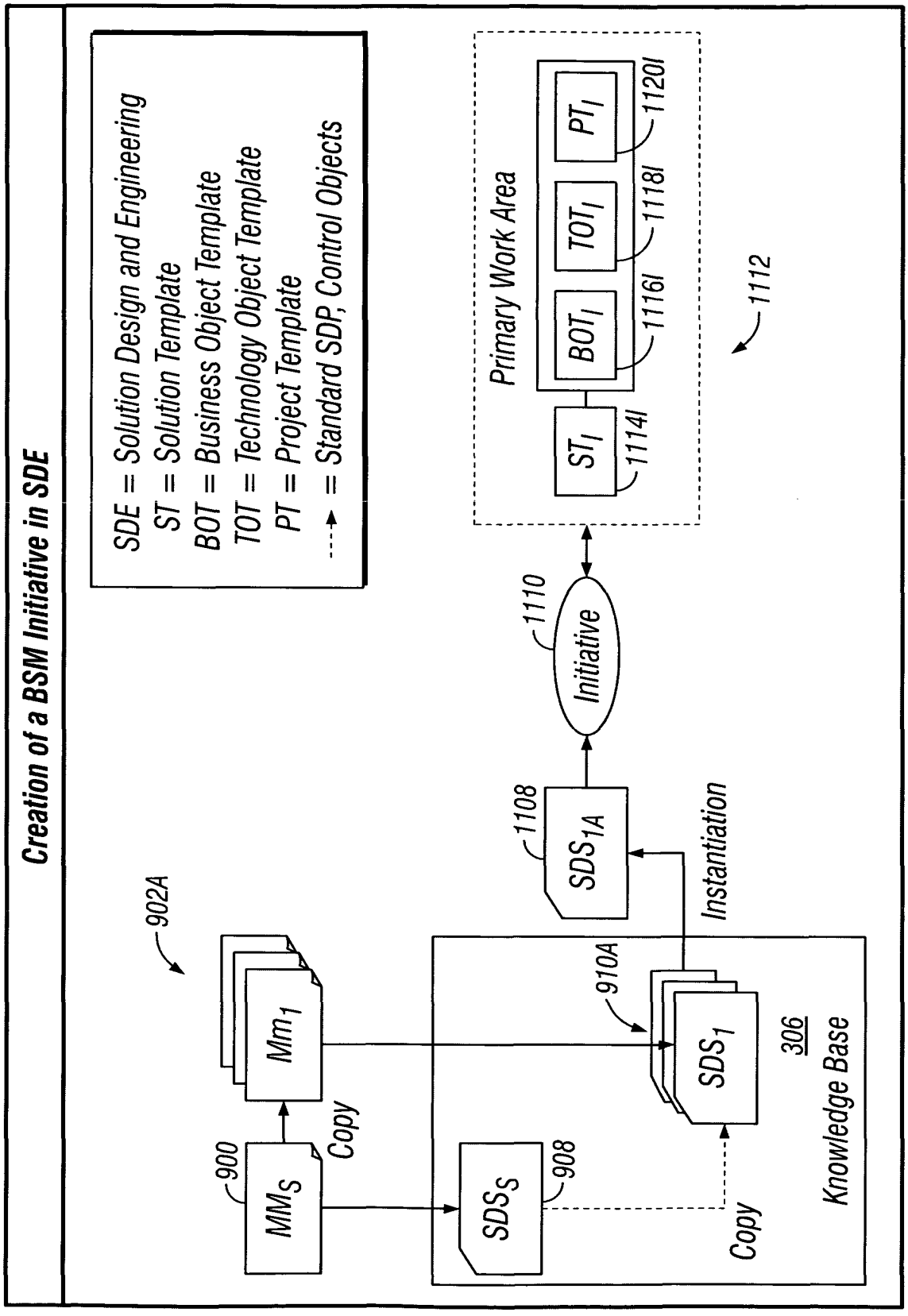
Creation of a BSM Initiative in SDE
SDE = Solution Design and Engineering
ST = Solution Template
BOT = Business Object Template
TOT = Technology Object Template
PT = Project Template
= Standard SDP, Control Objects
Primary Work Area
1112
ST_I
1114I
BOT_I
1116I
TOT_I
1118I
PT_I
1120I
1110
Initiative
1108
SDS_{1A}
Instantiation
902A
Mm_1
Copy
900
MM_S
910A
SDS_1
SDS_S
908
Copy
306
Knowledge Base

FIG. 11

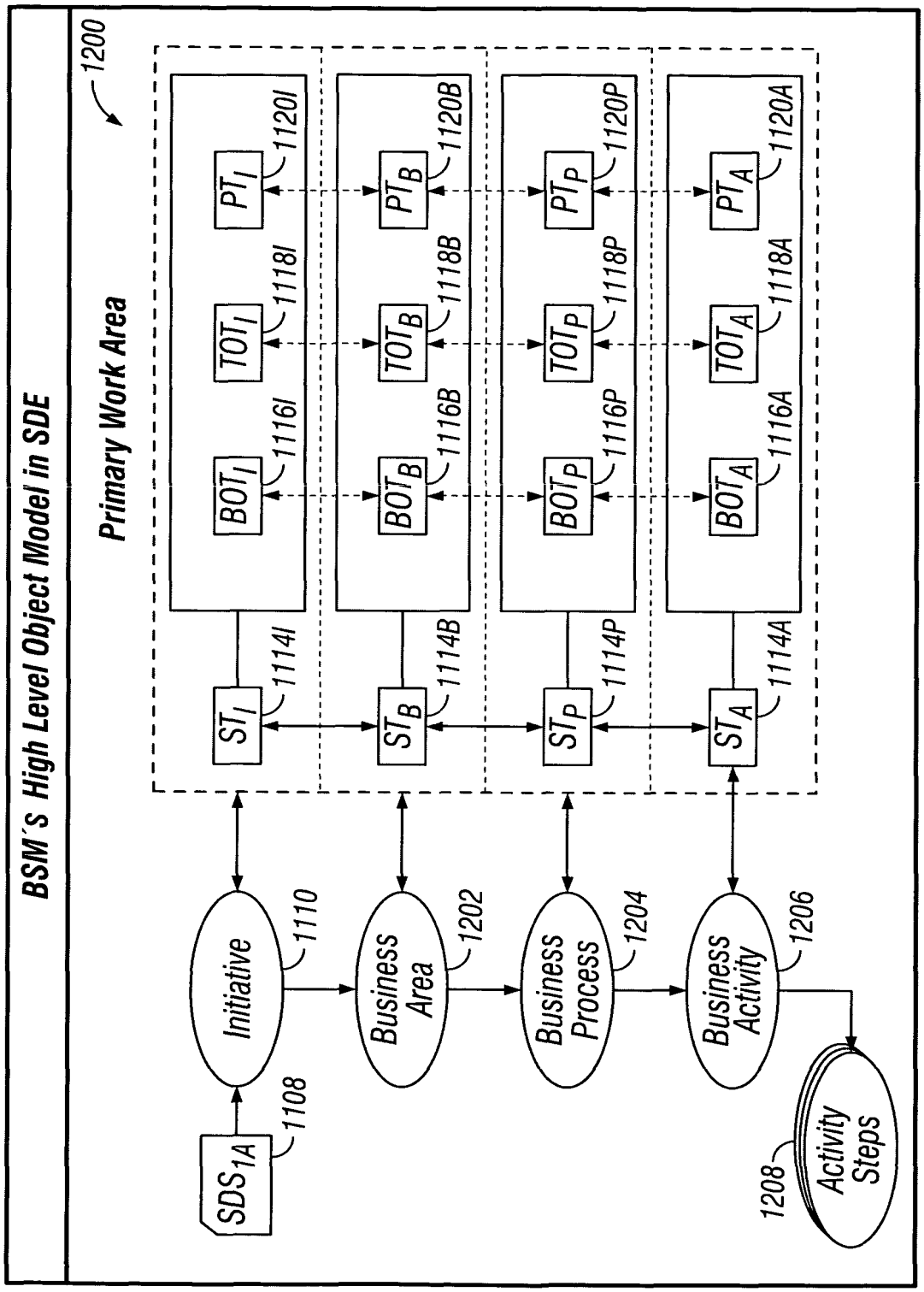
BSM's High Level Object Model in SDE
Primary Work Area
1200
Initiative
1110
Business Area
1202
Business Process
1204
Business Activity
1206
Activity Steps
1208
SDS1A
1108
STI
1114I
STB
1114B
STP
1114P
STA
1114A
BOTI
1116I
TOTI
1118I
PTI
1120I
BOTB
1116B
TOTB
1118B
PTB
1120B
BOTP
1116P
TOTP
1118P
PTP
1120P
BOTA
1116A
TOTA
1118A
PTA
1120A

FIG. 12

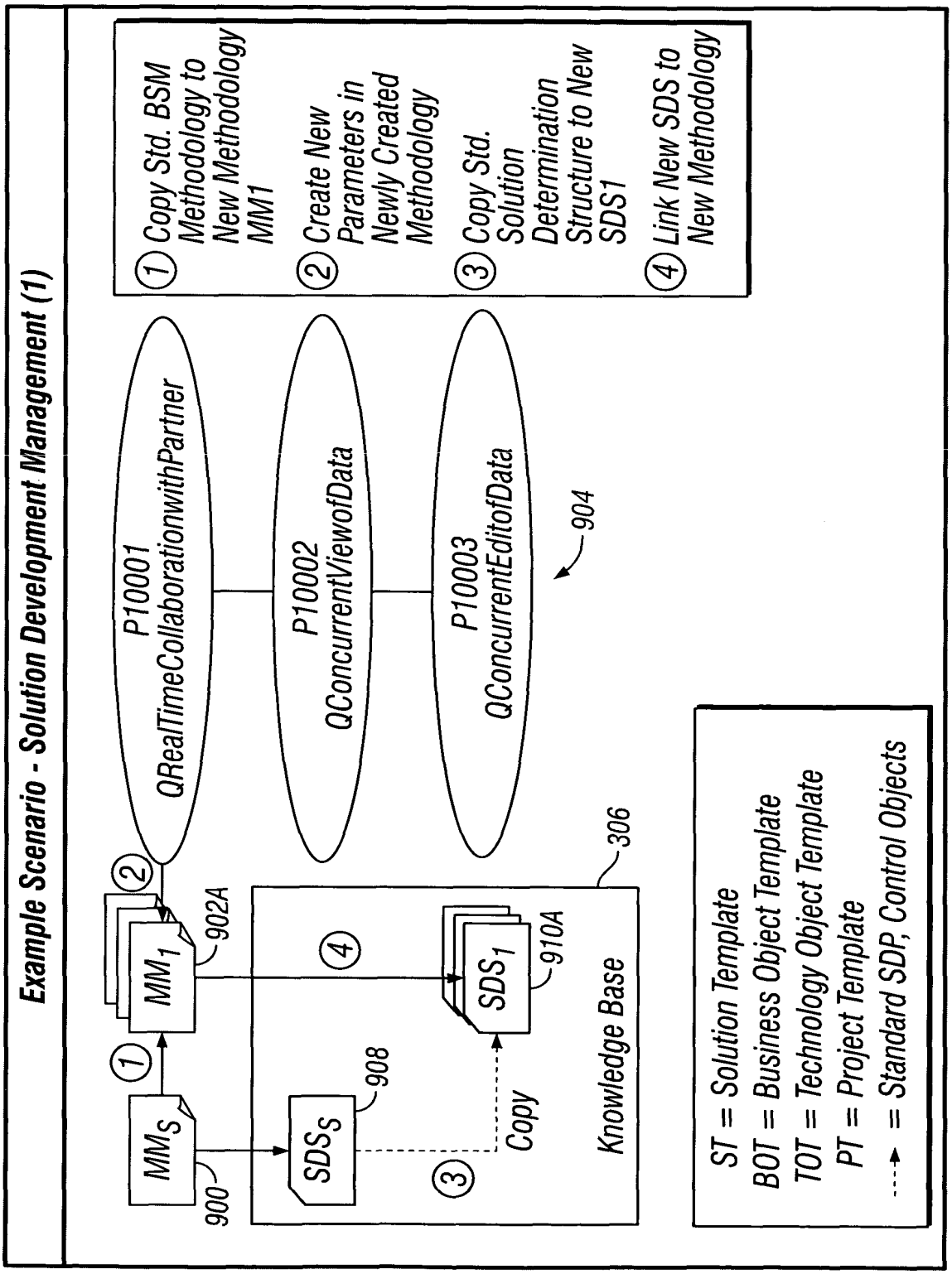
Example Scenario - Solution Development Management (1)
1 Copy Std. BSM Methodology to New Methodology MM1
2 Create New Parameters in Newly Created Methodology
3 Copy Std. Solution Determination Structure to New SDS1
4 Link New SDS to New Methodology
P10001 QRealTimeCollaborationwithPartner
P10002 QConcurrentViewofData
P10003 QConcurrentEditofData
904
306
Knowledge Base
MMS
900
SDSS
908
MM1
902A
SDS1
910A
Copy
ST = Solution Template
BOT = Business Object Template
TOT = Technology Object Template
PT = Project Template
= Standard SDP, Control Objects

FIG. 13

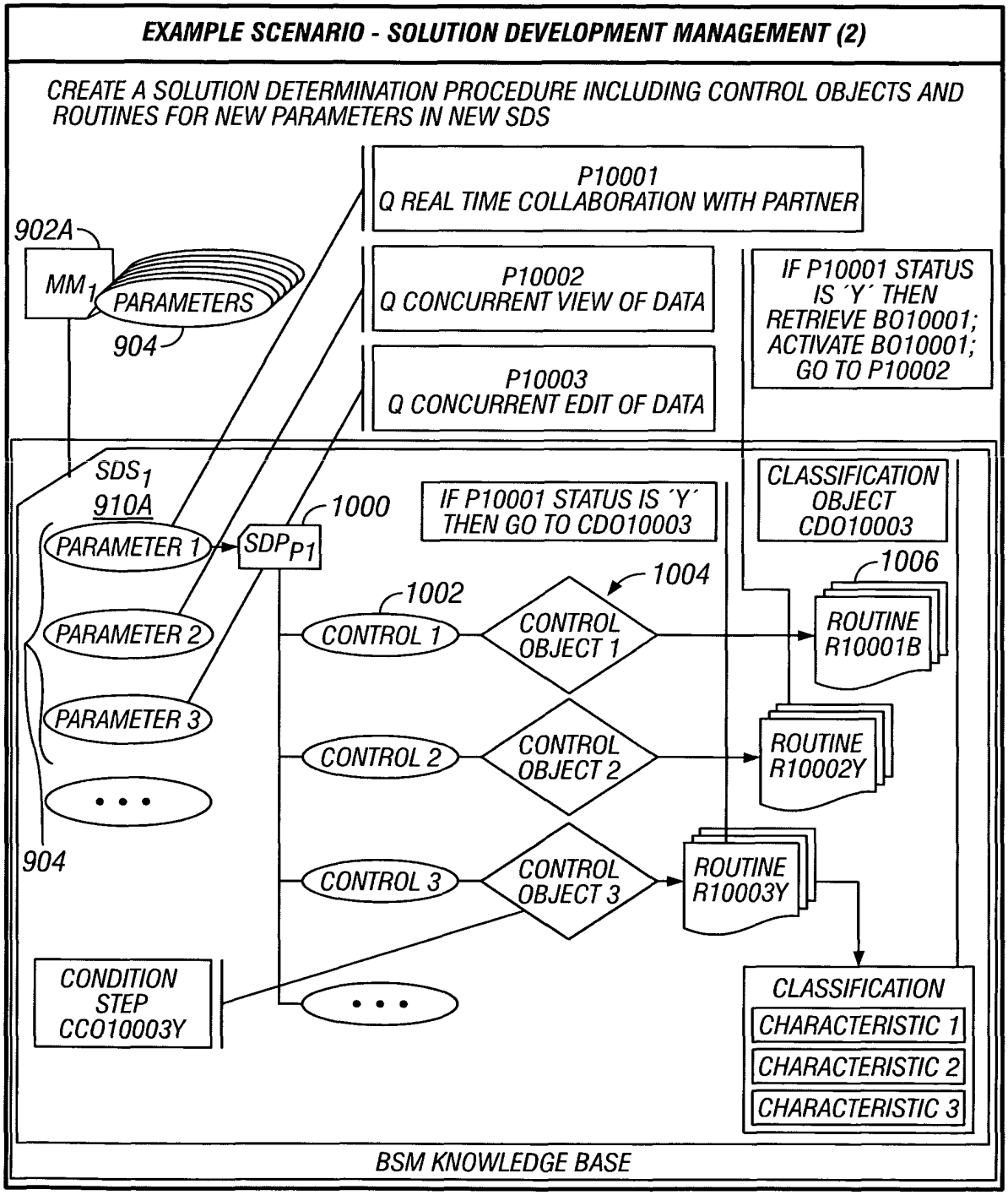
EXAMPLE SCENARIO - SOLUTION DEVELOPMENT MANAGEMENT (2)
CREATE A SOLUTION DETERMINATION PROCEDURE INCLUDING CONTROL OBJECTS AND ROUTINES FOR NEW PARAMETERS IN NEW SDS
P10001
Q REAL TIME COLLABORATION WITH PARTNER
P10002
Q CONCURRENT VIEW OF DATA
P10003
Q CONCURRENT EDIT OF DATA
IF P10001 STATUS IS 'Y' THEN RETRIEVE BO10001; ACTIVATE BO10001; GO TO P10002
902A
MM1
PARAMETERS
904
SDS1
910A
1000
SDPP1
IF P10001 STATUS IS 'Y' THEN GO TO CDO10003
CLASSIFICATION OBJECT CDO10003
1004
1006
1002
PARAMETER 1
PARAMETER 2
PARAMETER 3
CONTROL 1
CONTROL 2
CONTROL 3
CONTROL OBJECT 1
CONTROL OBJECT 2
CONTROL OBJECT 3
ROUTINE R10001B
ROUTINE R10002Y
ROUTINE R10003Y
CONDITION STEP CCO10003Y
CLASSIFICATION
CHARACTERISTIC 1
CHARACTERISTIC 2
CHARACTERISTIC 3
BSM KNOWLEDGE BASE

FIG. 14

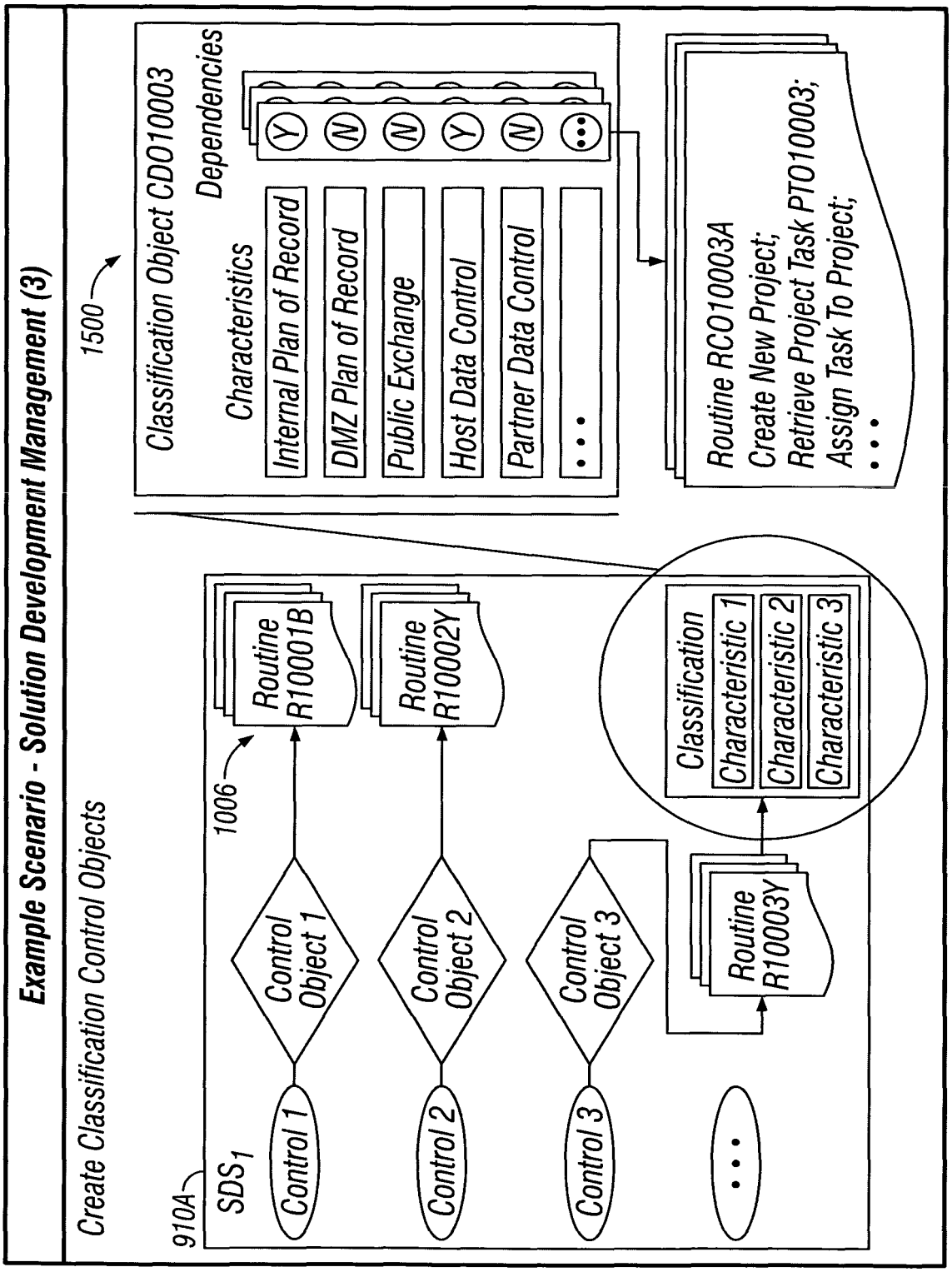
Example Scenario - Solution Development Management (3)
Create Classification Control Objects
1500
Classification Object CDO10003
Characteristics
Dependencies
Internal Plan of Record
DMZ Plan of Record
Public Exchange
Host Data Control
Partner Data Control
Y
N
N
Y
N
Routine RCO10003A
Create New Project;
Retrieve Project Task PTO10003;
Assign Task To Project;
910A
SDS1
1006
Control 1
Control 2
Control 3
Control Object 1
Control Object 2
Control Object 3
Routine R10001B
Routine R10002Y
Routine R10003Y
Classification
Characteristic 1
Characteristic 2
Characteristic 3

FIG. 15

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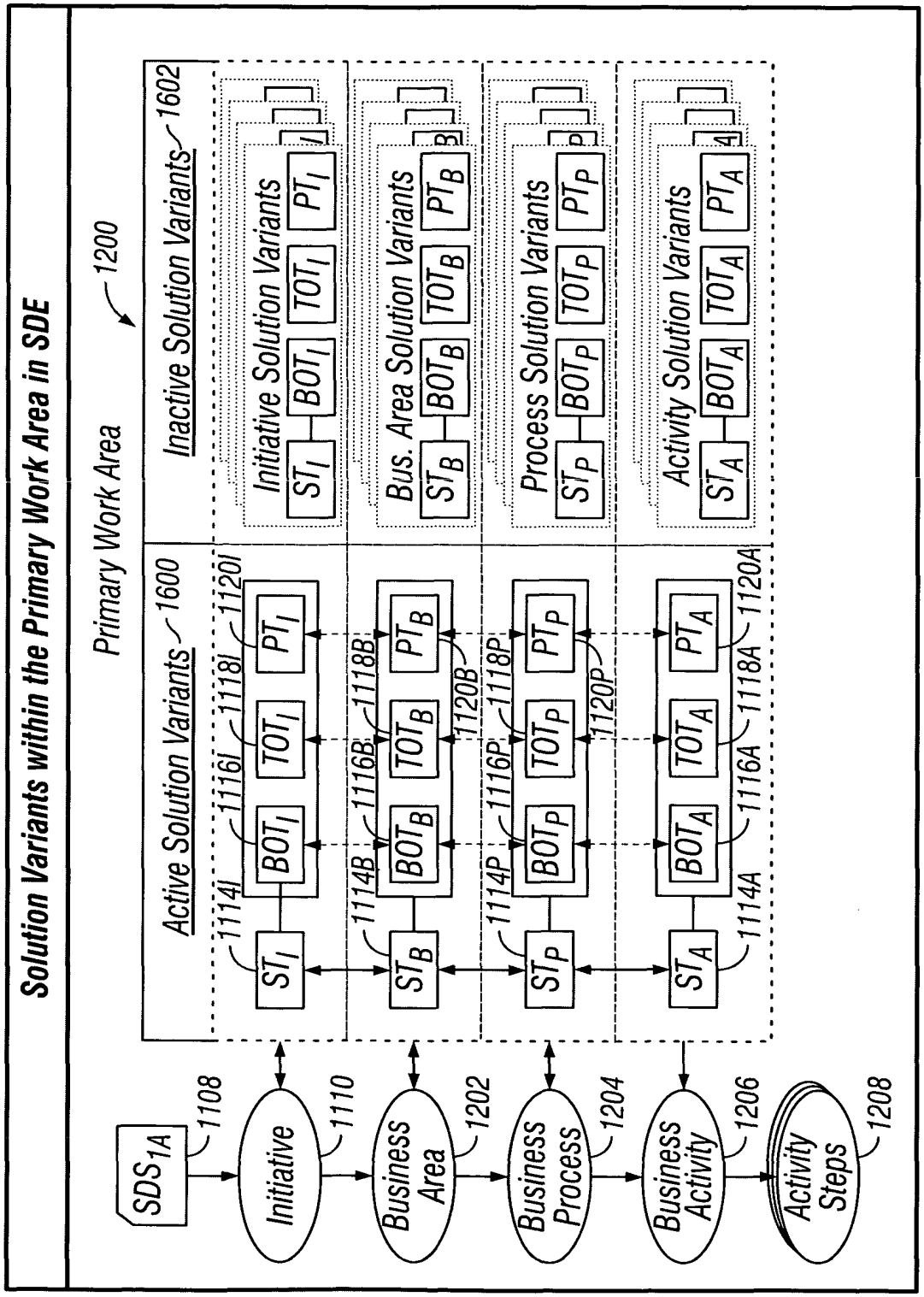
Solution Variants within the Primary Work Area in SDE
Primary Work Area
1200
Active Solution Variants
1600
Inactive Solution Variants
1602
SDS1A
1108
Initiative
1110
Business Area
1202
Business Process
1204
Business Activity
1206
Activity Steps
1208
Initiative Solution Variants
Bus. Area Solution Variants
Process Solution Variants
Activity Solution Variants
STI
BOTI
TOTI
PTI
STB
BOTB
TOTB
PTB
STP
BOTP
TOTP
PTP
STA
BOTA
TOTA
PTA
1114I
1116I
1118I
1120I
1114B
1116B
1118B
1120B
1114P
1116P
1118P
1120P
1114A
1116A
1118A
1120A

FIG. 16

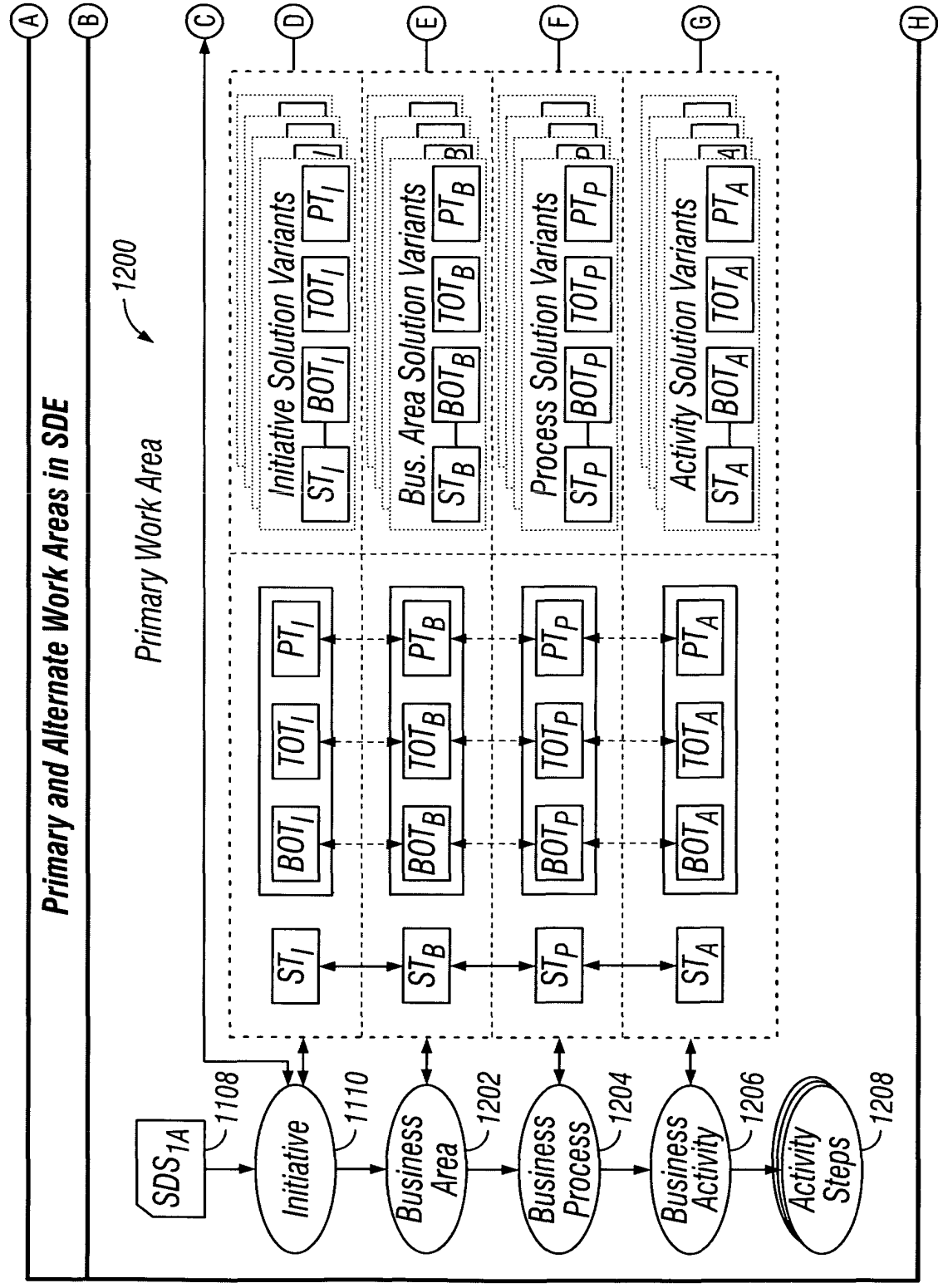
A
B
C
D
E
F
G
H
Primary and Alternate Work Areas in SDE
1200
Primary Work Area
Initiative Solution Variants
Bus. Area Solution Variants
Process Solution Variants
Activity Solution Variants
ST_I
BOT_I
TOT_I
PT_I
ST_B
BOT_B
TOT_B
PT_B
ST_P
BOT_P
TOT_P
PT_P
ST_A
BOT_A
TOT_A
PT_A
SDS_{1A}
1108
Initiative
1110
Business Area
1202
Business Process
1204
Business Activity
1206
Activity Steps
1208

FIG. 17A

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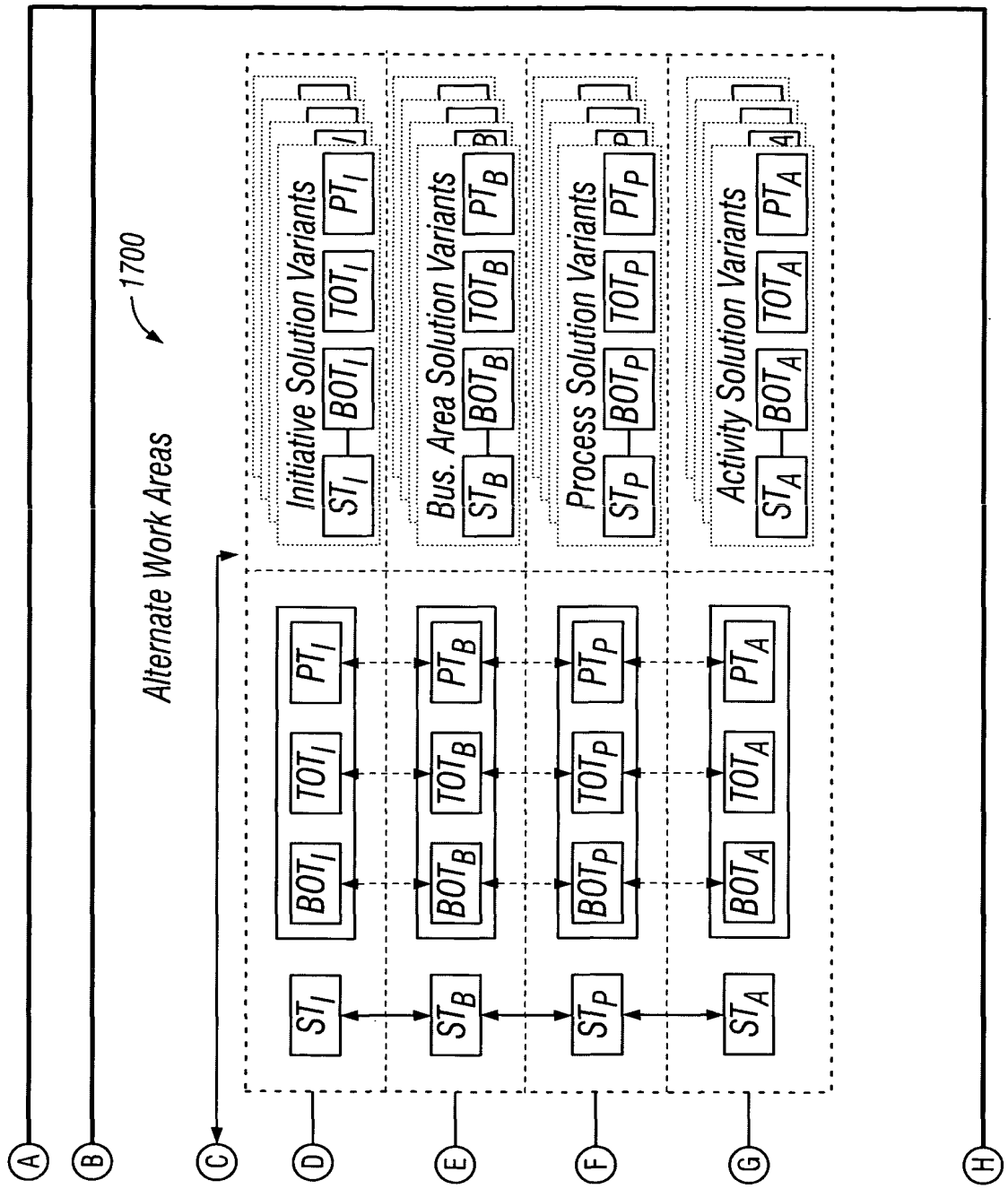
1700
Alternate Work Areas
Initiative Solution Variants
Bus. Area Solution Variants
Process Solution Variants
Activity Solution Variants
ST_I
BOT_I
TOT_I
PT_I
ST_B
BOT_B
TOT_B
PT_B
ST_P
BOT_P
TOT_P
PT_P
ST_A
BOT_A
TOT_A
PT_A
A
B
C
D
E
F
G
H

FIG. 17B

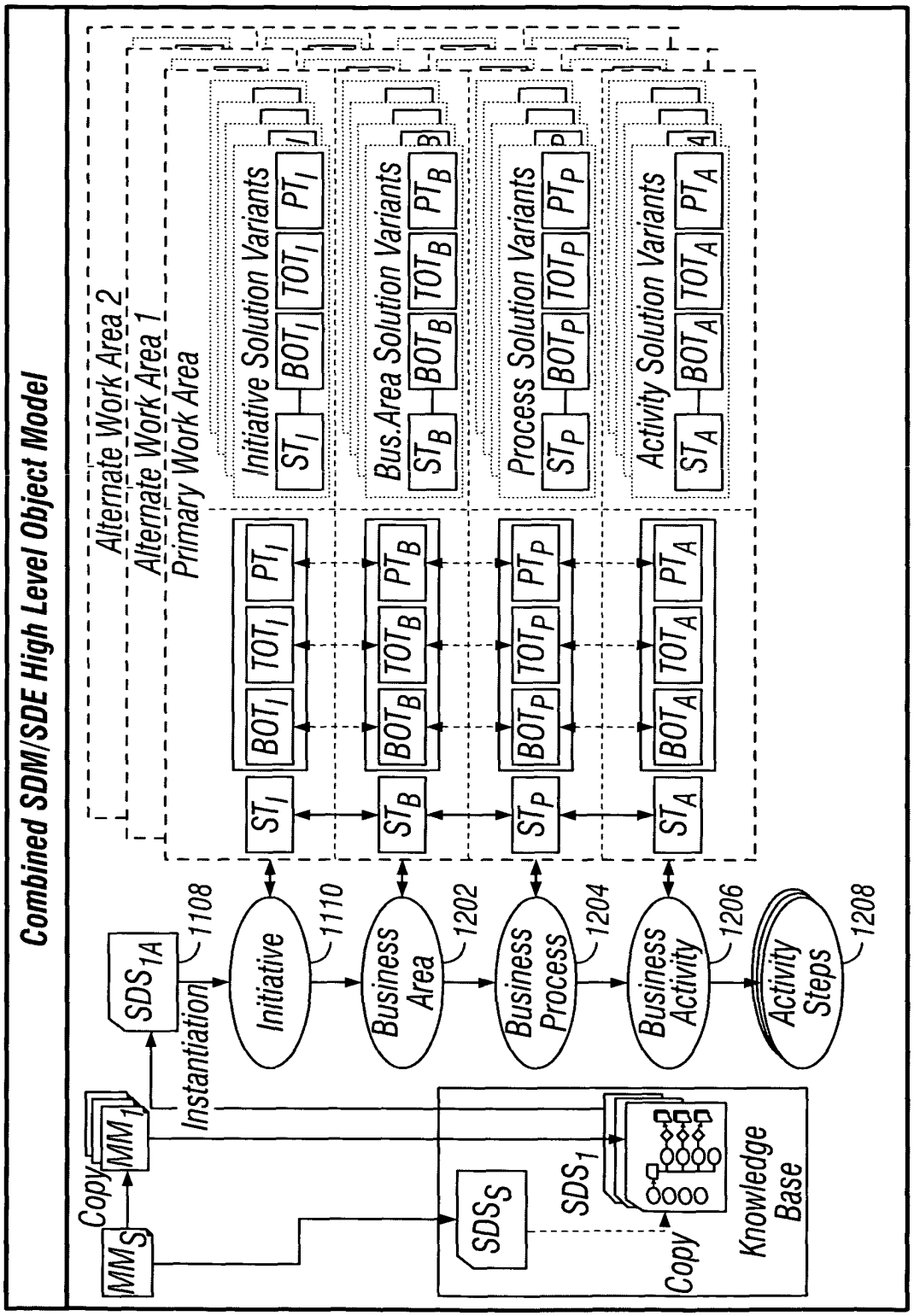
Combined SDM/SDE High Level Object Model
Alternate Work Area 2
Alternate Work Area 1
Primary Work Area
Initiative Solution Variants
Bus.Area Solution Variants
Process Solution Variants
Activity Solution Variants
ST_I
BOT_I
TOT_I
PT_I
ST_B
BOT_B
TOT_B
PT_B
ST_P
BOT_P
TOT_P
PT_P
ST_A
BOT_A
TOT_A
PT_A
SDS_1A
1108
Instantiation
Initiative
1110
Business Area
1202
Business Process
1204
Business Activity
1206
Activity Steps
1208
Copy
MM_1
MM_S
SDS_S
SDS_1
Copy
Knowledge Base

FIG. 18

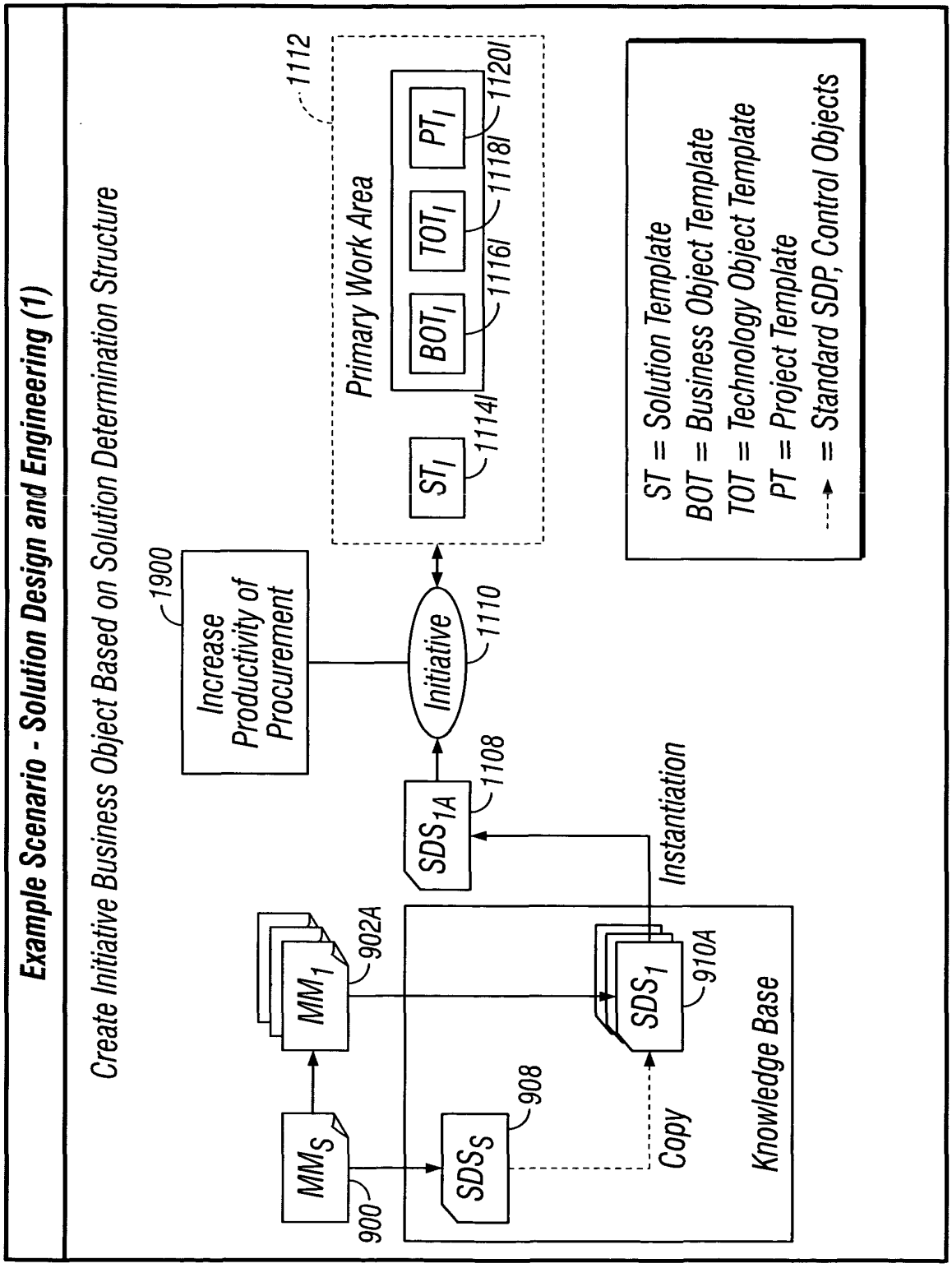
Example Scenario - Solution Design and Engineering (1)
Create Initiative Business Object Based on Solution Determination Structure
1900
Increase Productivity of Procurement
Initiative
1110
1112
Primary Work Area
ST_I
1114I
BOT_I
TOT_I
PT_I
1116I
1118I
1120I
SDS_1A
1108
Instantiation
MM_S
900
MM_1
902A
SDS_S
908
SDS_1
910A
Copy
Knowledge Base
ST = Solution Template
BOT = Business Object Template
TOT = Technology Object Template
PT = Project Template
= Standard SDP, Control Objects

FIG. 19A

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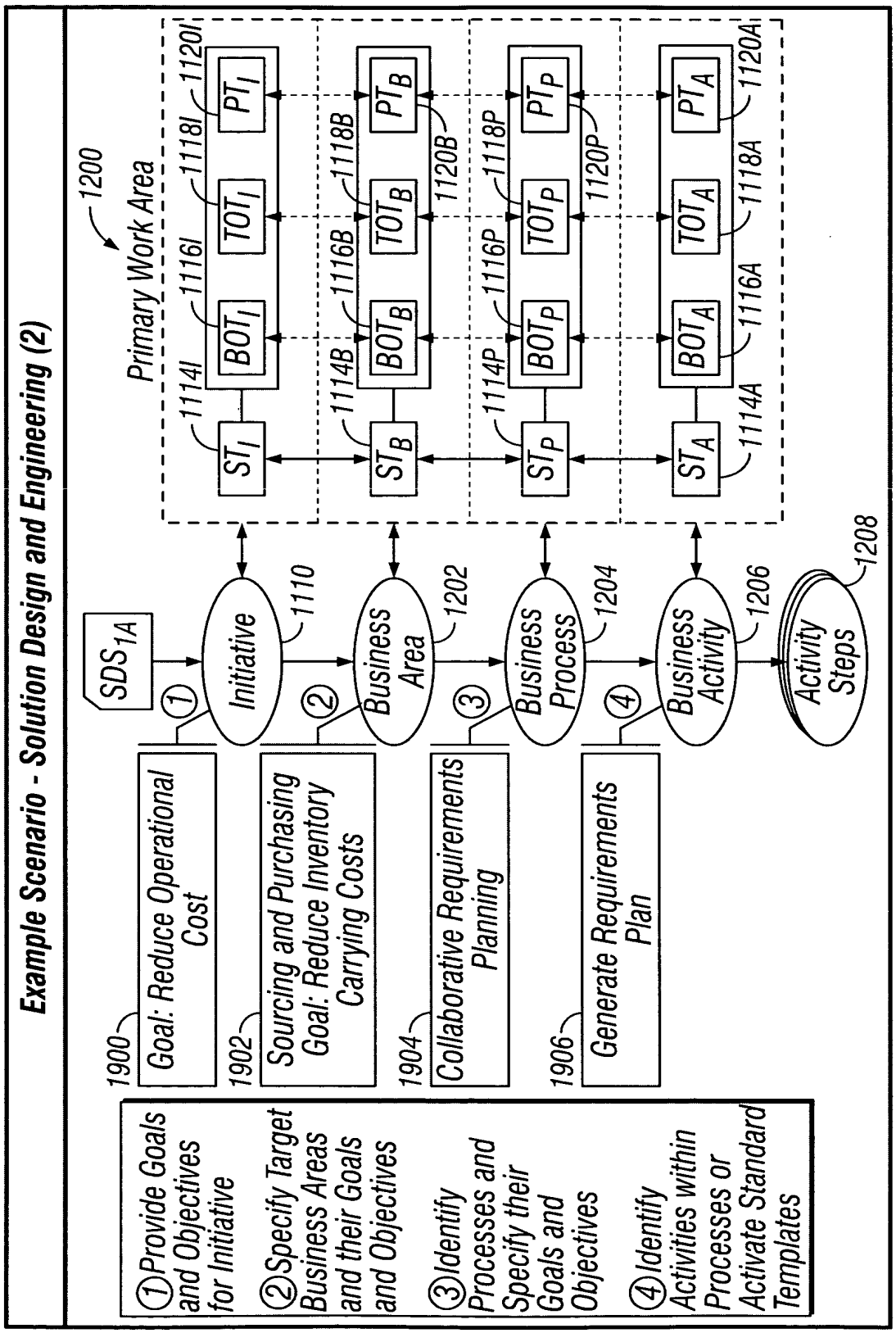
Example Scenario - Solution Design and Engineering (2)
1200
Primary Work Area
SDS1A
Initiative
1110
Business Area
1202
Business Process
1204
Business Activity
1206
Activity Steps
1208
1900
Goal: Reduce Operational Cost
1902
Sourcing and Purchasing Goal: Reduce Inventory Carrying Costs
1904
Collaborative Requirements Planning
1906
Generate Requirements Plan
1Provide Goals and Objectives for Initiative
2Specify Target Business Areas and their Goals and Objectives
3Identify Processes and Specify their Goals and Objectives
4Identify Activities within Processes or Activate Standard Templates
STI
BOTI
TOTI
PTI
1114I
1116I
1118I
1120I
STB
BOTB
TOTB
PTB
1114B
1116B
1118B
1120B
STP
BOTP
TOTP
PTP
1114P
1116P
1118P
1120P
STA
BOTA
TOTA
PTA
1114A
1116A
1118A
1120A

FIG. 19B

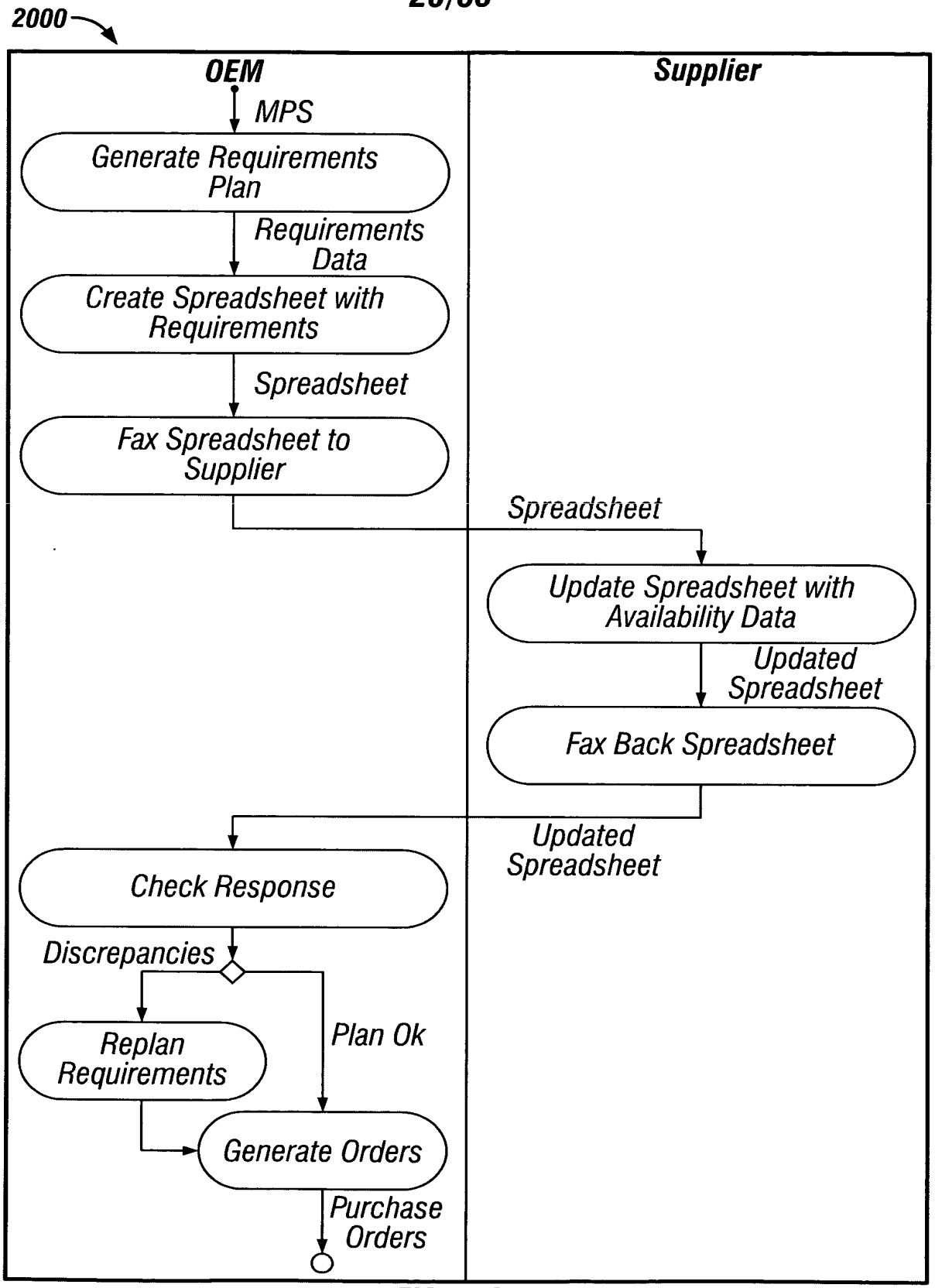
2000
OEM
Supplier
MPS
Generate Requirements Plan
Requirements Data
Create Spreadsheet with Requirements
Spreadsheet
Fax Spreadsheet to Supplier
Spreadsheet
Update Spreadsheet with Availability Data
Updated Spreadsheet
Fax Back Spreadsheet
Updated Spreadsheet
Check Response
Discrepancies
Plan Ok
Replan Requirements
Generate Orders
Purchase Orders

FIG. 20A

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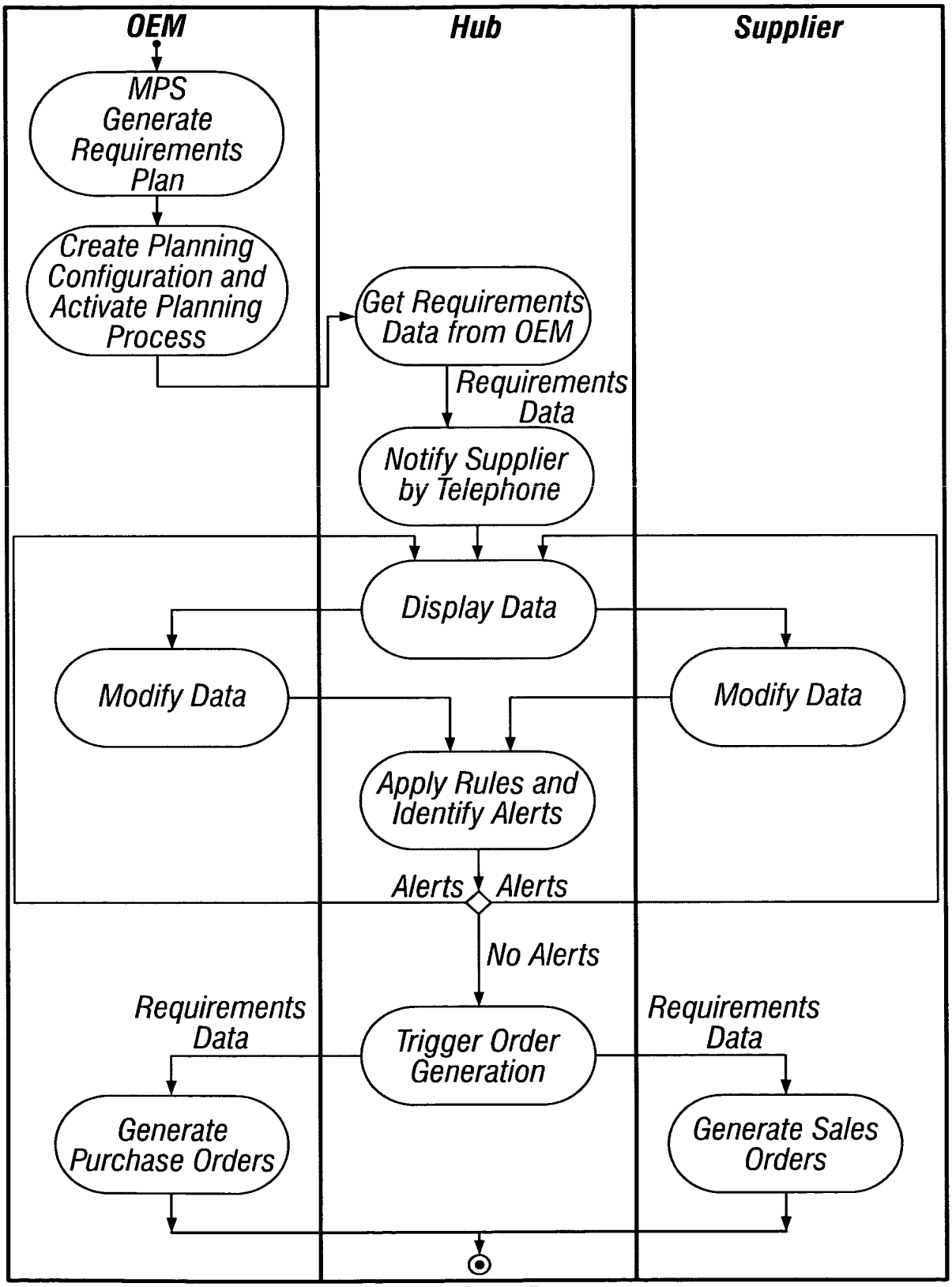
2002
OEM
Hub
Supplier
MPS Generate Requirements Plan
Create Planning Configuration and Activate Planning Process
Get Requirements Data from OEM
Requirements Data
Notify Supplier by Telephone
Display Data
Modify Data
Modify Data
Apply Rules and Identify Alerts
Alerts
Alerts
No Alerts
Requirements Data
Trigger Order Generation
Requirements Data
Generate Purchase Orders
Generate Sales Orders

FIG. 20B

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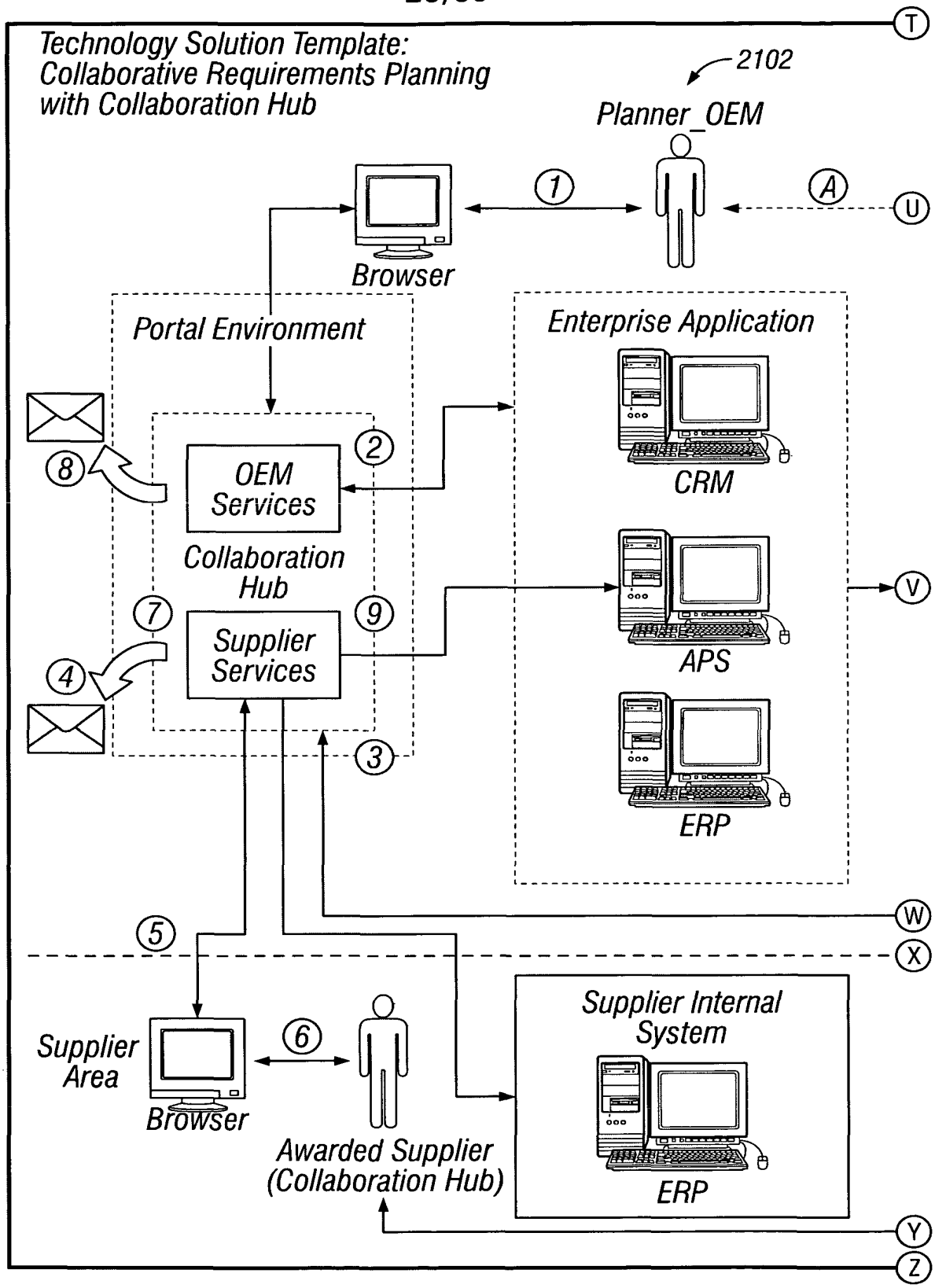
Technology Solution Template:
Collaborative Requirements Planning
with Collaboration Hub
2102
Planner_OEM
Browser
Portal Environment
Enterprise Application
OEM Services
Collaboration Hub
Supplier Services
CRM
APS
ERP
Supplier Area
Browser
Awarded Supplier (Collaboration Hub)
Supplier Internal System
ERP
T
U
V
W
X
Y
Z
A
1
2
3
4
5
6
7
8
9

FIG. 21A

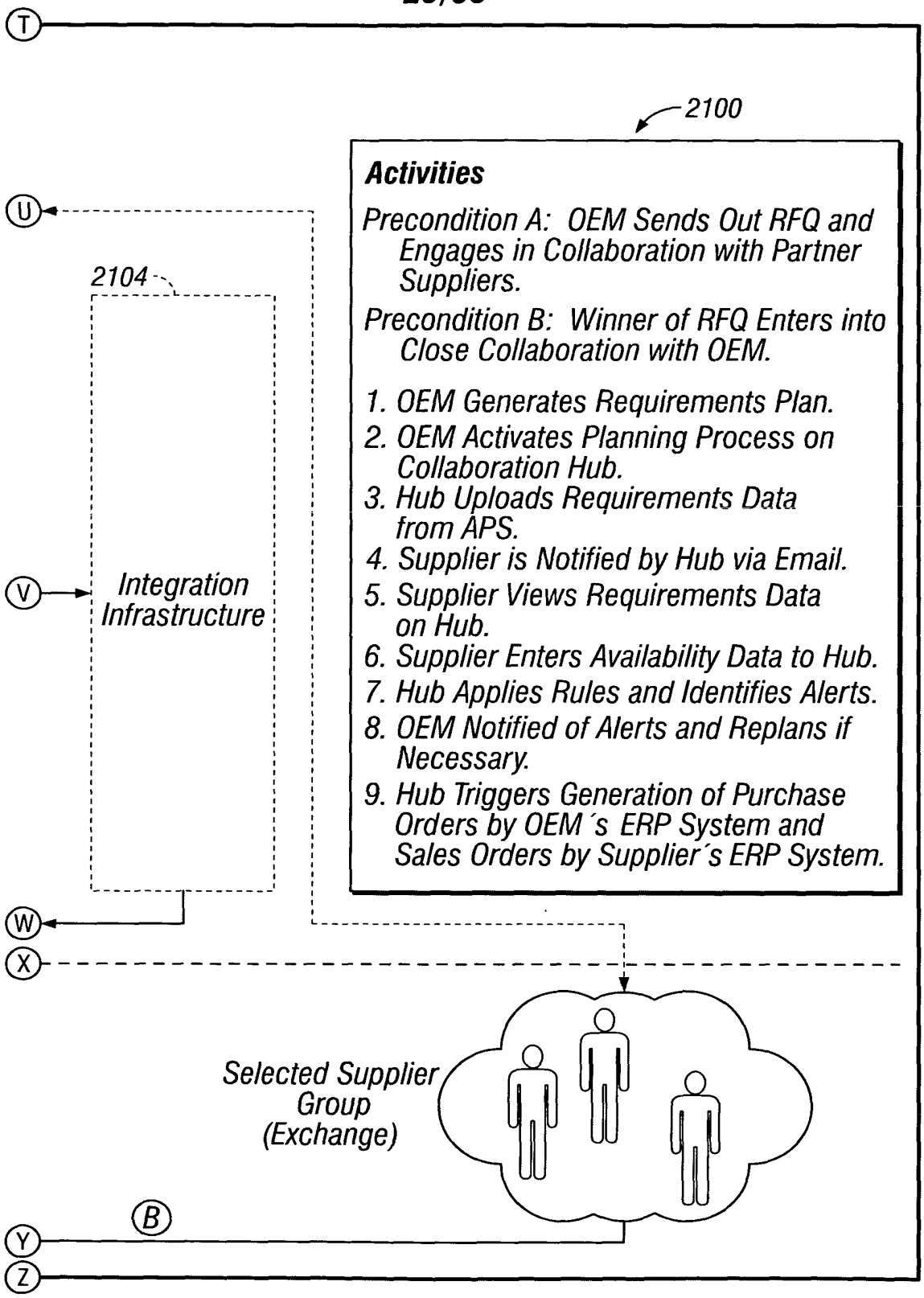
T
2100
Activities
Precondition A: OEM Sends Out RFQ and Engages in Collaboration with Partner Suppliers.
Precondition B: Winner of RFQ Enters into Close Collaboration with OEM.
1. OEM Generates Requirements Plan.
2. OEM Activates Planning Process on Collaboration Hub.
3. Hub Uploads Requirements Data from APS.
4. Supplier is Notified by Hub via Email.
5. Supplier Views Requirements Data on Hub.
6. Supplier Enters Availability Data to Hub.
7. Hub Applies Rules and Identifies Alerts.
8. OEM Notified of Alerts and Replans if Necessary.
9. Hub Triggers Generation of Purchase Orders by OEM´s ERP System and Sales Orders by Supplier´s ERP System.
U
2104
V
Integration Infrastructure
W
X
Selected Supplier Group (Exchange)
B
Y
Z

FIG. 21B

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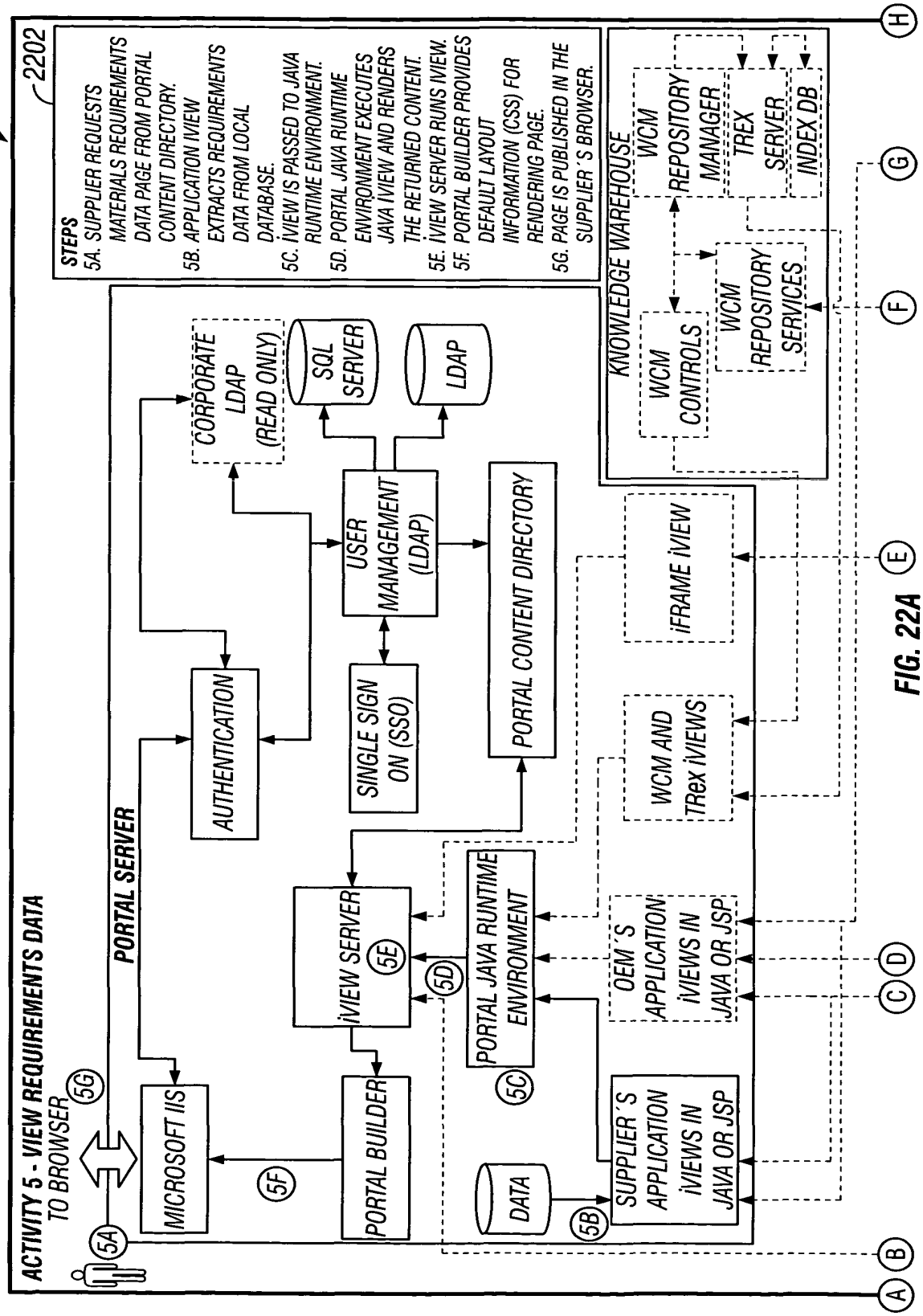
2200
2202
ACTIVITY 5 - VIEW REQUIREMENTS DATA
TO BROWSER
PORTAL SERVER
STEPS
5A. SUPPLIER REQUESTS MATERIALS REQUIREMENTS DATA PAGE FROM PORTAL CONTENT DIRECTORY.
5B. APPLICATION IVIEW EXTRACTS REQUIREMENTS DATA FROM LOCAL DATABASE.
5C. IVIEW IS PASSED TO JAVA RUNTIME ENVIRONMENT.
5D. PORTAL JAVA RUNTIME ENVIRONMENT EXECUTES JAVA IVIEW AND RENDERS THE RETURNED CONTENT.
5E. IVIEW SERVER RUNS IVIEW.
5F. PORTAL BUILDER PROVIDES DEFAULT LAYOUT INFORMATION (CSS) FOR RENDERING PAGE.
5G. PAGE IS PUBLISHED IN THE SUPPLIER'S BROWSER.
KNOWLEDGE WAREHOUSE
WCM CONTROLS
WCM REPOSITORY SERVICES
WCM REPOSITORY MANAGER
TREX SERVER
INDEX DB
CORPORATE LDAP (READ ONLY)
SQL SERVER
LDAP
USER MANAGEMENT (LDAP)
AUTHENTICATION
SINGLE SIGN ON (SSO)
PORTAL CONTENT DIRECTORY
iFRAME iVIEW
WCM AND TRex iVIEWS
OEM'S APPLICATION iVIEWS IN JAVA OR JSP
SUPPLIER'S APPLICATION iVIEWS IN JAVA OR JSP
MICROSOFT IIS
PORTAL BUILDER
iVIEW SERVER
PORTAL JAVA RUNTIME ENVIRONMENT
DATA
5A
5B
5C
5D
5E
5F
5G
A
B
C
D
E
F
G
H

FIG. 22A

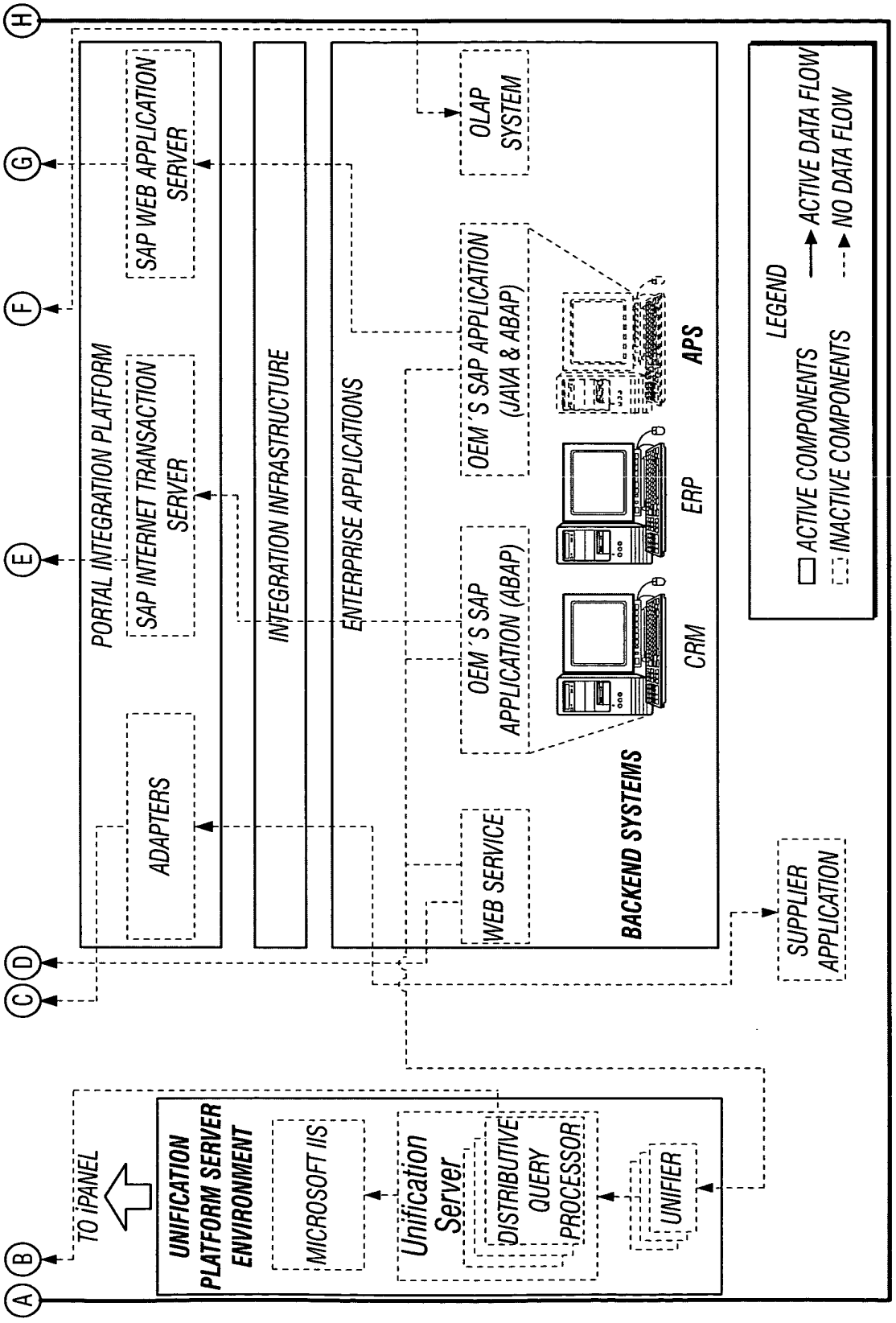
A
B
C
D
E
F
G
H
TO iPANEL
UNIFICATION PLATFORM SERVER ENVIRONMENT
MICROSOFT IIS
Unification Server
DISTRIBUTIVE QUERY PROCESSOR
UNIFIER
PORTAL INTEGRATION PLATFORM
ADAPTERS
SAP INTERNET TRANSACTION SERVER
SAP WEB APPLICATION SERVER
INTEGRATION INFRASTRUCTURE
ENTERPRISE APPLICATIONS
WEB SERVICE
OEM'S SAP APPLICATION (ABAP)
OEM'S SAP APPLICATION (JAVA & ABAP)
OLAP SYSTEM
BACKEND SYSTEMS
CRM
ERP
APS
SUPPLIER APPLICATION
LEGEND
ACTIVE COMPONENTS
INACTIVE COMPONENTS
ACTIVE DATA FLOW
NO DATA FLOW

FIG. 22B

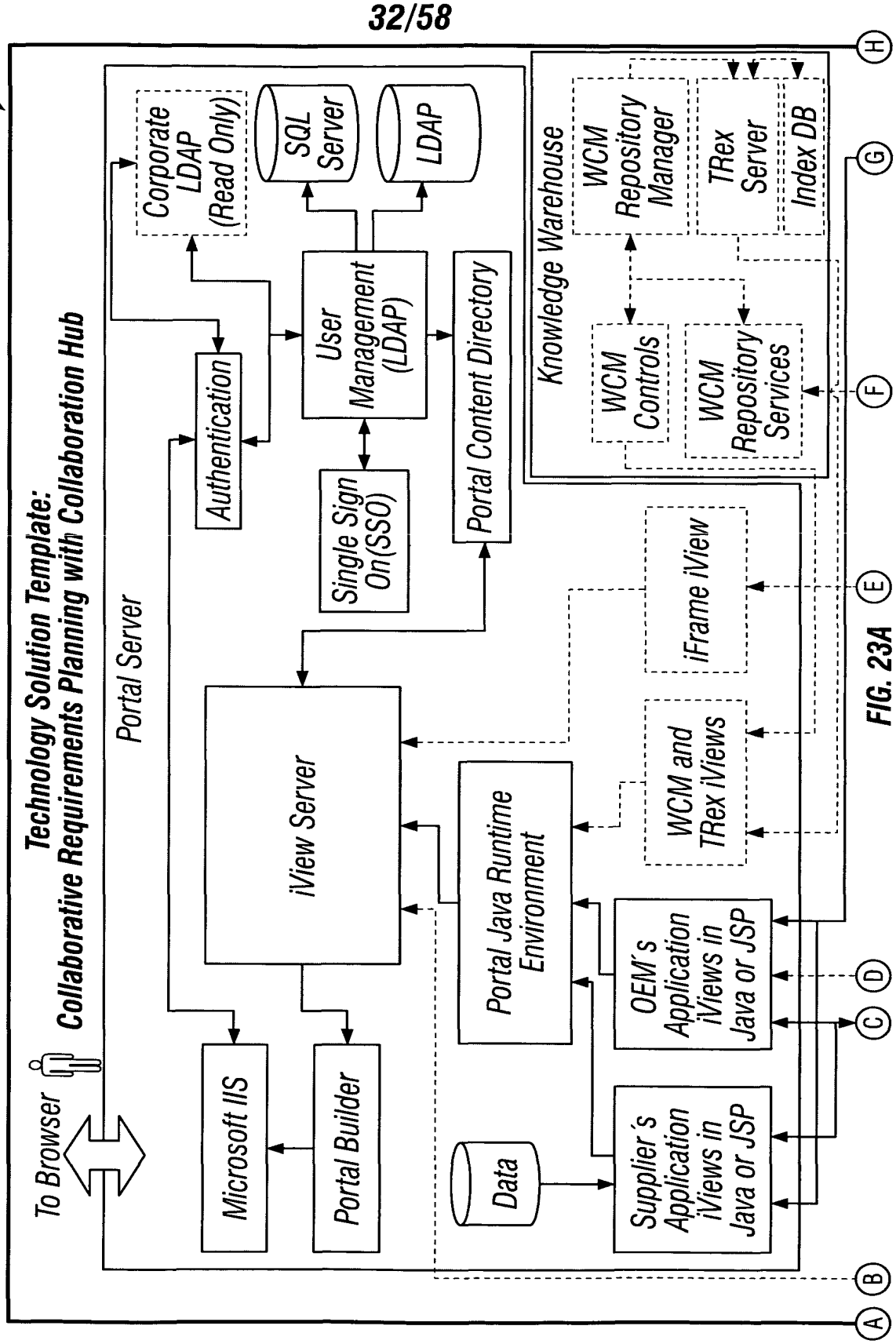
2300
Technology Solution Template:
Collaborative Requirements Planning with Collaboration Hub
To Browser
Portal Server
Corporate LDAP (Read Only)
SQL Server
LDAP
Authentication
User Management (LDAP)
Portal Content Directory
Single Sign On(SSO)
Knowledge Warehouse
WCM Repository Manager
TRex Server
Index DB
WCM Controls
WCM Repository Services
iFrame iView
iView Server
WCM and TRex iViews
Portal Java Runtime Environment
OEM's Application iViews in Java or JSP
Microsoft IIS
Portal Builder
Data
Supplier's Application iViews in Java or JSP
A
B
C
D
E
F
G
H

FIG. 23A

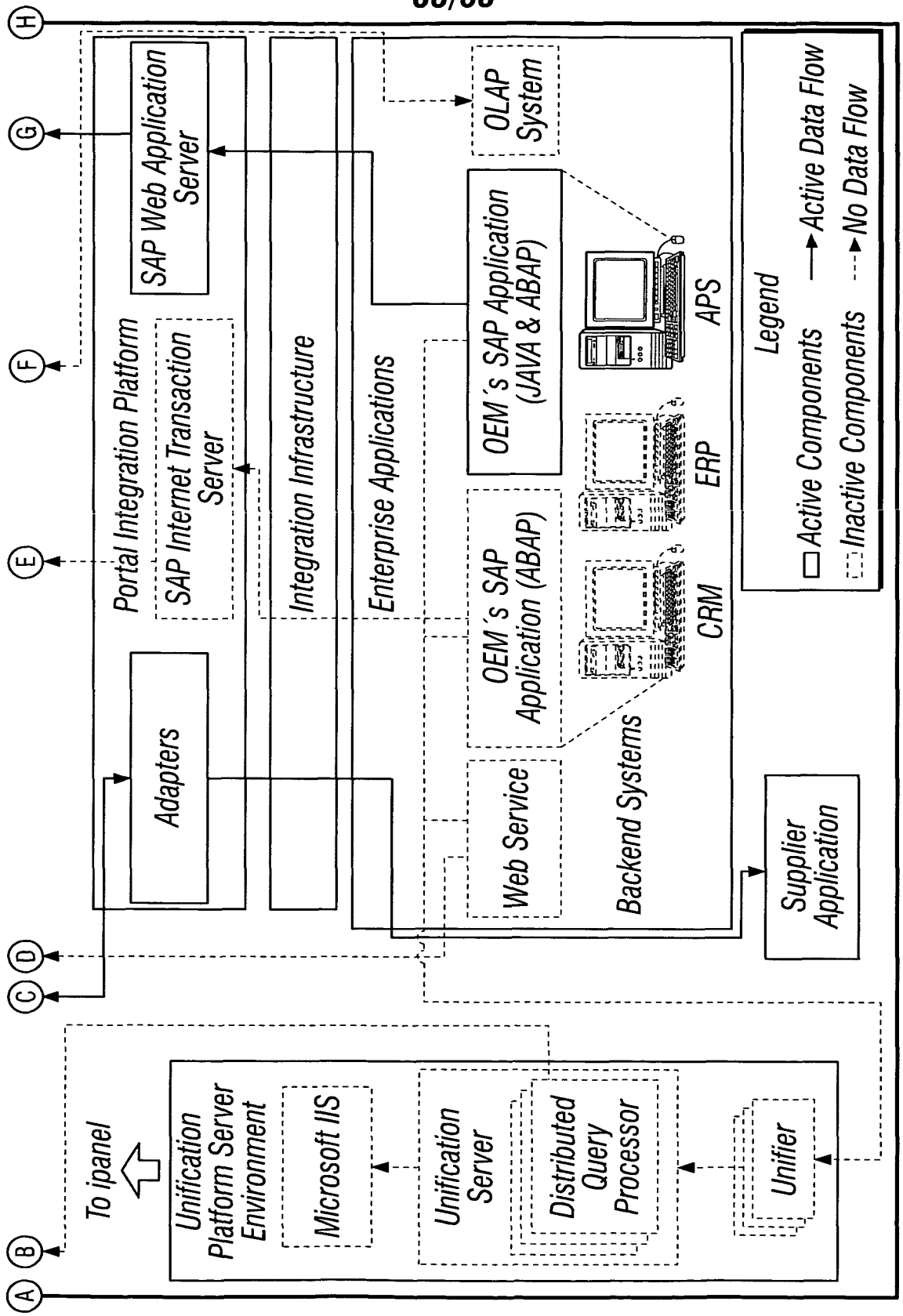
A
B
C
D
E
F
G
H
To ipanel
Unification Platform Server Environment
Microsoft IIS
Unification Server
Distributed Query Processor
Unifier
Portal Integration Platform
SAP Web Application Server
SAP Internet Transaction Server
Adapters
Integration Infrastructure
Enterprise Applications
OLAP System
OEM´s SAP Application (JAVA & ABAP)
OEM´s SAP Application (ABAP)
Web Service
Backend Systems
APS
ERP
CRM
Supplier Application
Legend
Active Components
Inactive Components
Active Data Flow
No Data Flow

FIG. 23B

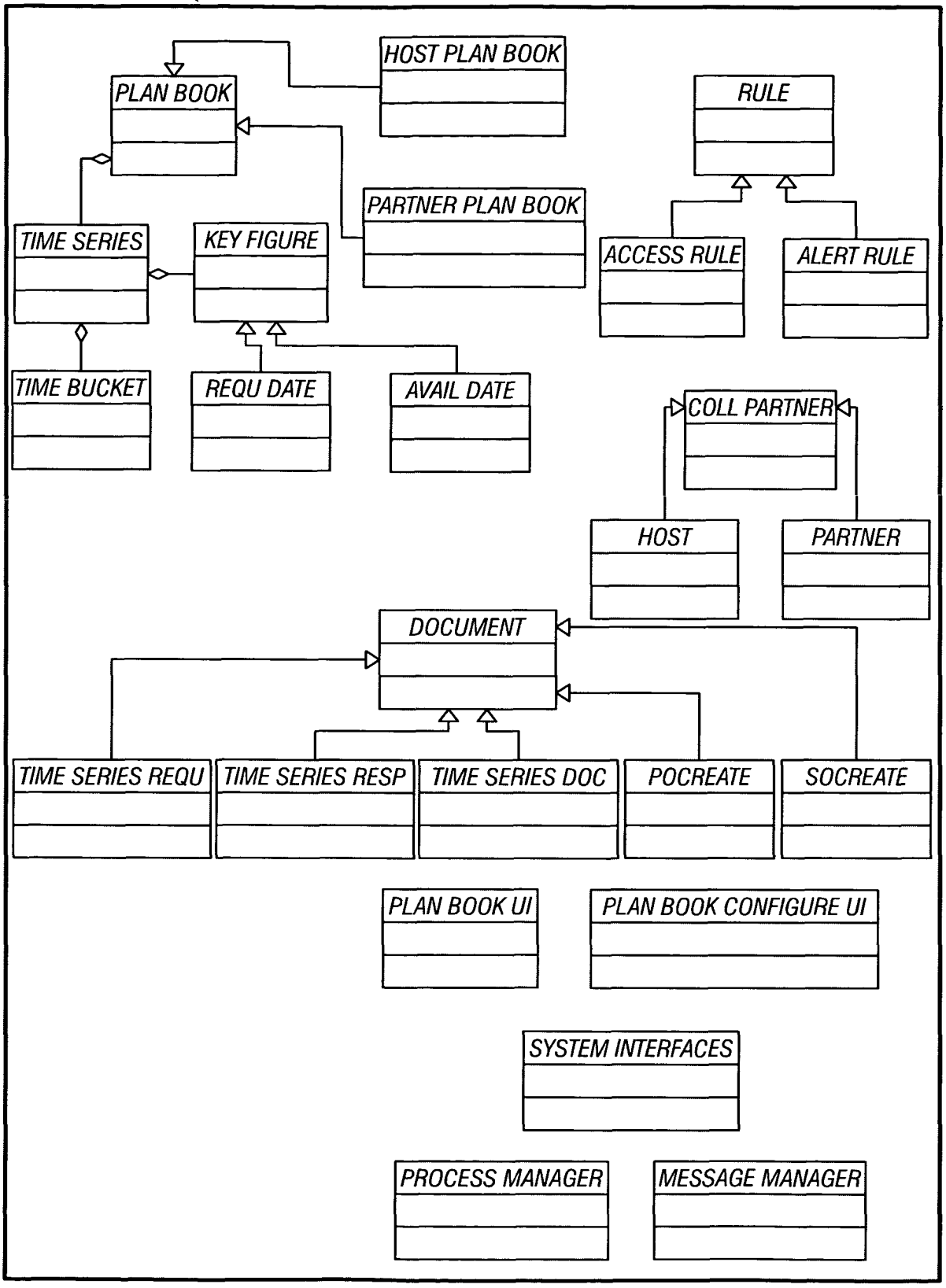
2700
HOST PLAN BOOK
PLAN BOOK
RULE
PARTNER PLAN BOOK
TIME SERIES
KEY FIGURE
ACCESS RULE
ALERT RULE
TIME BUCKET
REQU DATE
AVAIL DATE
COLL PARTNER
HOST
PARTNER
DOCUMENT
TIME SERIES REQU
TIME SERIES RESP
TIME SERIES DOC
POCREATE
SOCREATE
PLAN BOOK UI
PLAN BOOK CONFIGURE UI
SYSTEM INTERFACES
PROCESS MANAGER
MESSAGE MANAGER

FIG. 24

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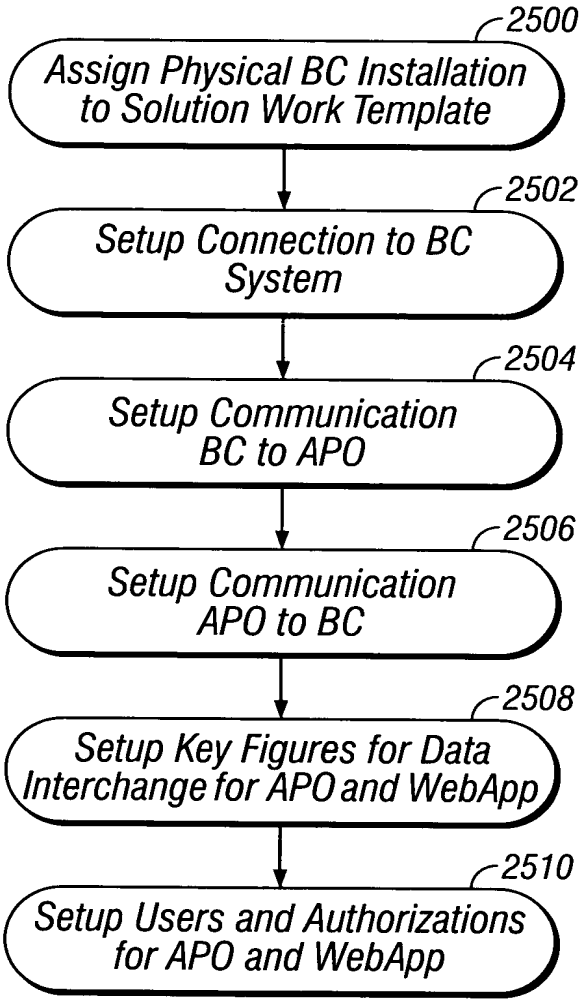
2500
Assign Physical BC Installation to Solution Work Template
2502
Setup Connection to BC System
2504
Setup Communication BC to APO
2506
Setup Communication APO to BC
2508
Setup Key Figures for Data Interchange for APO and WebApp
2510
Setup Users and Authorizations for APO and WebApp

FIG. 25

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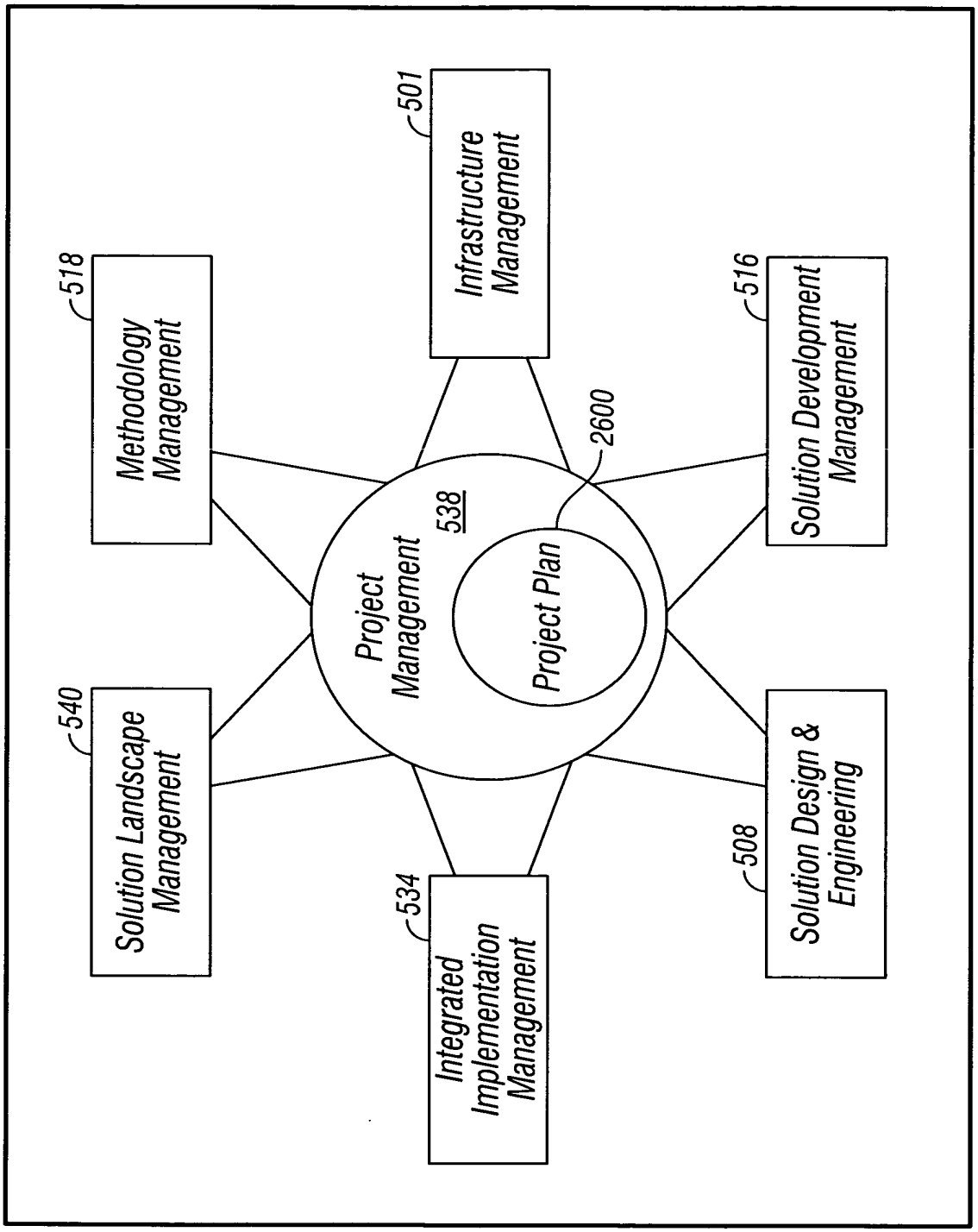
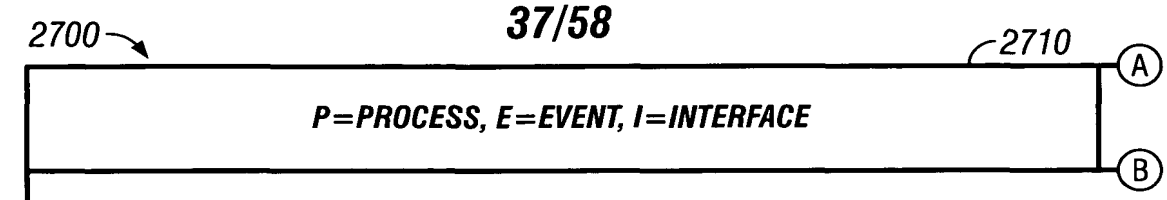

501
Infrastructure Management
518
Methodology Management
516
Solution Development Management
2600
538
Project Management
Project Plan
540
Solution Landscape Management
508
Solution Design & Engineering
534
Integrated Implementation Management

FIG. 26



P1 ***PRODUCT STRATEGY PROCESS***

P1.1 *PRODUCT STRATEGY BUSINESS SCENARIO*

P1.2 *STOCK BALANCING/ROTATION BUSINESS SCENARIO*

E1 ***IDENTIFY SALES REQUIREMENTS:***

E1.1 *AUCTION OWNER-PRODUCT STRATEGY (ie; END OF LIFE)*

E1.2 *SELLERS - SALES REQUIREMENTS*

P2 ***REVERSE AUCTION SEARCH PROCESS***

P2.1 *IF FOUND, FOLLOW ´SELLER´S BID PROCESS´ WITHIN THE REVERSE AUCTION SCENARIO*

E2 ***CREATE/MODIFY OPPORTUNITY GROUP***

E2.1 *OPTION 1 (R/3 EVENT).*

E2.1.1 *CREATE OR MODIFY A SAP MASTER CONTRACT*

E2.1.2 *START ´CREATE/MODIFY OPPORTUNITY GROUP INTERFACE´*

E2.2 *OPTION 2 (NON-R/3 ERP EVENT)*

E2.2.1 *CREATE RELEVANT Opp GROUP DOCUMENT*

E2.2.2 *START ´CREATE/MODIFY OPPORTUNITY GROUP INTERFACE´*

E2.3 *OPTION 3 (DTOPPS APPLICATION ONLY) - NO ERP*

E2.3.1 *LOGIN TO DTOPPS APPLICATION*

E2.3.2 *CREATE GROUPING ON DTOPPS APPLICATION*

INTERFACE 1 (I1) - CREATE OPPORTUNITY GROUP INTERFACE

E3 ***DEFINE OPPORTUNITY HEADER***

E3.1 *OPTION 1(R/3 EVENT)*

E3.1.1 *CREATE QTY CONTRACT WITH TERMS & CONDITIONS AS WELL AS PROPOSED QTY, MIN PRICE, START PRICE*

E3.1.2 *START ´OPPORTUNITY HEADER INTERFACE (I2)´ WITH THE OPPORTUNITY TYPE SET AS ´TRADING EXCHANGE´ OR ´AUCTION´*

C

FIG. 27A

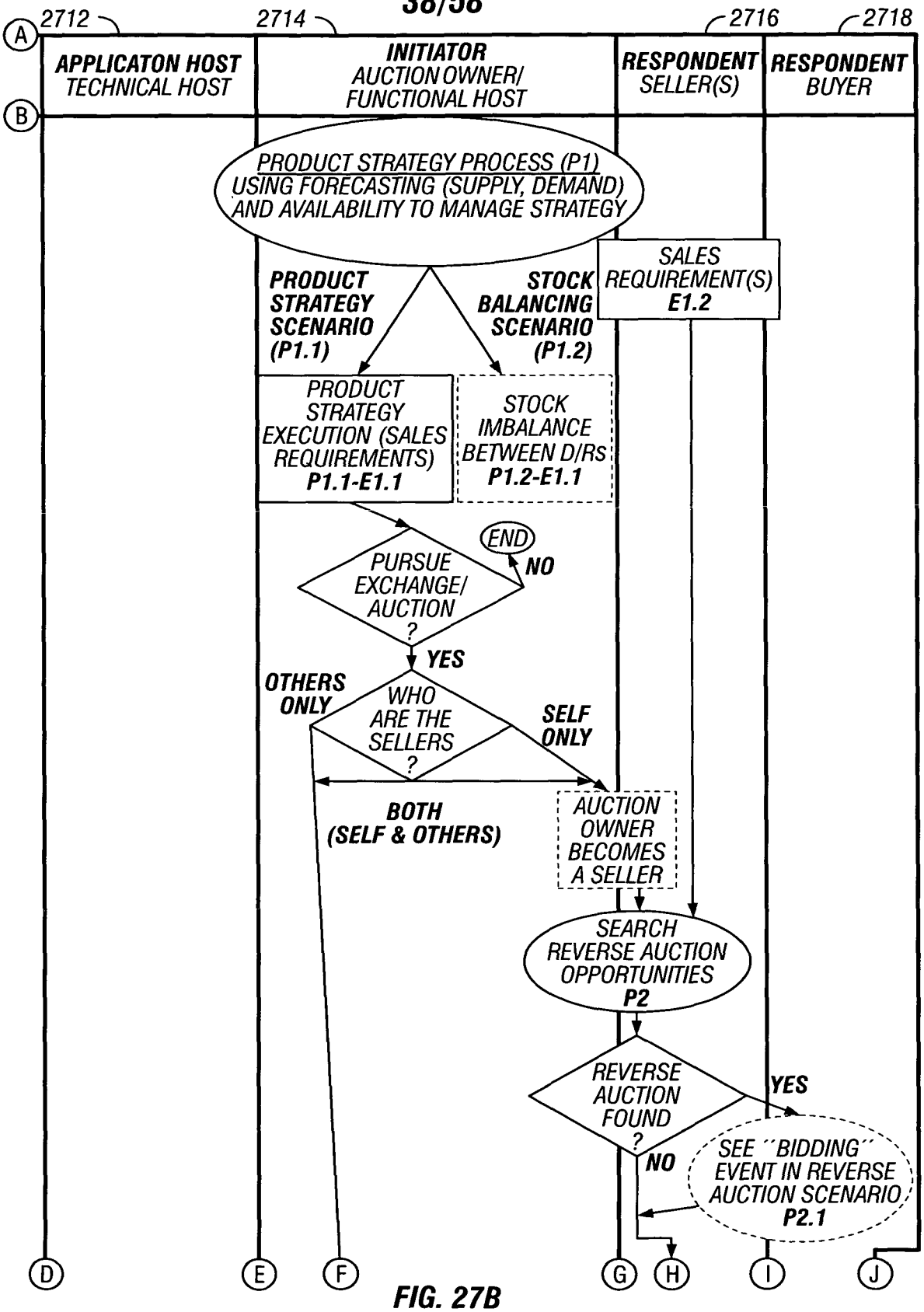

2712
2714
2716
2718
A
B
APPLICATON HOST
TECHNICAL HOST
INITIATOR
AUCTION OWNER/
FUNCTIONAL HOST
RESPONDENT
SELLER(S)
RESPONDENT
BUYER
PRODUCT STRATEGY PROCESS (P1)
USING FORECASTING (SUPPLY, DEMAND)
AND AVAILABILITY TO MANAGE STRATEGY
SALES
REQUIREMENT(S)
E1.2
PRODUCT
STRATEGY
SCENARIO
(P1.1)
STOCK
BALANCING
SCENARIO
(P1.2)
PRODUCT
STRATEGY
EXECUTION (SALES
REQUIREMENTS)
P1.1-E1.1
STOCK
IMBALANCE
BETWEEN D/Rs
P1.2-E1.1
END
NO
PURSUE
EXCHANGE/
AUCTION
?
YES
OTHERS
ONLY
WHO
ARE THE
SELLERS
?
SELF
ONLY
BOTH
(SELF & OTHERS)
AUCTION
OWNER
BECOMES
A SELLER
SEARCH
REVERSE AUCTION
OPPORTUNITIES
P2
REVERSE
AUCTION
FOUND
?
YES
NO
SEE "BIDDING"
EVENT IN REVERSE
AUCTION SCENARIO
P2.1
D
E
F
G
H
I
J

FIG. 27B

(C) 2702

E3.2 OPTION 2 (NON-R/3 ERP EVENT)
E3.2.1 CREATE ERP SALES DOC TO HOLD AUCTION DATA
E3.2.2 START ´OPPORTUNITY HEADER INTERFACE (I2)´ WITH THE OPPORTUNITY TYPE SET AS ´TRADING EXCHANGE´ OR ´AUCTION´

E3.3 OPTION 3 (DTOPPS APPLICATION ONLY) - NO ERP
E3.3.1 LOGIN (SEE E2.3.1)
E3.3.2 CREATE OPPORTUNITY (TRADING EXCHANGE OR AUCTION) ON HOST

INTERFACE 2 (I2) - CREATE OPPORTUNITY HEADER INTERFACE

P3 CREATE INVITATION LIST
CREATE LIST OF POTENTIAL SELLERS THAT ARE TO BE INVITED TO PARTICIPATE. AUCTION OWNER EXCLUDED.

E4. APPLICATION HOST INVITES SELLERS TO PARTICIPATE
E4.1 OPTION 1 - NO DETAIL DATA DESIRED
E4.1.1 START ´INVITATION INTERFACE´USING PROFILE
E4.2 OPTION 2 - ERP DETAIL DATA REQUIRED
E4.2.1 DETERMINE INVITATION PREFERENCE FROM PROFILE
E4.2.2 START THE ´INVITATION INTERFACE´ TO SEND DATA TO ERP SYSTEM AS WELL AS THE INVITATION

INTERFACE 3 (I3) - INVITATION INTERFACE

OPTION 1 - NO OPPORTUNITY DETAIL DATA DESIRED
SEND INVITATION TO ERP AS SPECIFIED IN PROFILE
OPTION 2 - ERP DETAIL DATA REQUIRED
OPTION A (R/3 ONLY) - SEND WORKFLOW & ERP DATA
OPTION B (ANY ERP) - SEND INVITATION & ERP DATA

E5 RECEIVE OPPORTUNITY (OPTIONAL) AND/OR INVITATION

E5.1 OPTION 1 - NO OPPORTUNITY DETAIL DATA DESIRED
E5.1.1 RECEIVE INVITATION AS SPECIFIED IN PROFILE
E5.2 OPTION 2 - ERP DETAIL DATA REQUIRED
E5.2.1 OPTION A (R/3 ONLY) - RECEIVE WORKFLOW & ERP DATA
E5.2.2 OPTION B (ANY ERP) - RECEIVE INVITATION & ERP DATA

E6 SELLERS RESPOND

E6.1 OPTION 1 (R/3 EVENT)
E6.1.1 RESPONSE ENTERED INTO THE QUANTITY CONTRACT
E6.1.2 START ´MODIFY OPPORTUNITY (RESPONSE) INTERFACE´
E6.2 OPTION 2 (NON - R/3 ERP EVENT)
E6.2.1 RESPONSE ENTERED INTO THE ERP SYSTEM
E6.2.2 START ´MODIFY OPPORTUNITY (RESPONSE) INTERFACE´
E6.3 OPTION 3 (NON-ERP)
E6.3.1 LOGIN (SEE E2.3.1)
E6.3.2 UPDATE YOUR TRADING EXCHANGE INVENTORY ITEMS AND SAVE AS FINAL.

(K)

FIG. 27C

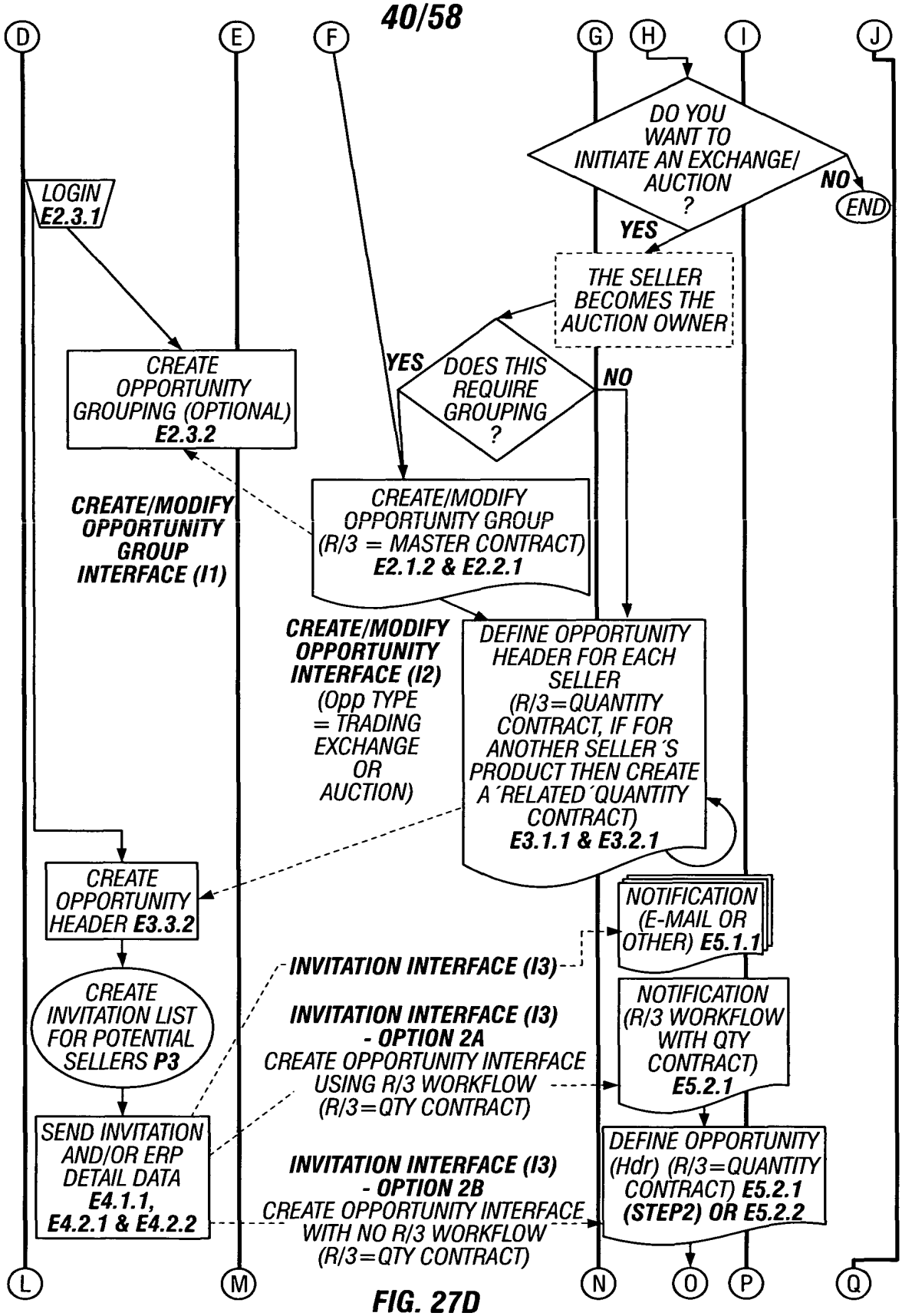

D
E
F
G
H
I
J
DO YOU WANT TO INITIATE AN EXCHANGE/ AUCTION ?
NO
END
YES
LOGIN E2.3.1
THE SELLER BECOMES THE AUCTION OWNER
CREATE OPPORTUNITY GROUPING (OPTIONAL) E2.3.2
YES
DOES THIS REQUIRE GROUPING ?
NO
CREATE/MODIFY OPPORTUNITY GROUP INTERFACE (I1)
CREATE/MODIFY OPPORTUNITY GROUP (R/3 = MASTER CONTRACT) E2.1.2 & E2.2.1
CREATE/MODIFY OPPORTUNITY INTERFACE (I2) (Opp TYPE = TRADING EXCHANGE OR AUCTION)
DEFINE OPPORTUNITY HEADER FOR EACH SELLER (R/3=QUANTITY CONTRACT, IF FOR ANOTHER SELLER'S PRODUCT THEN CREATE A 'RELATED' QUANTITY CONTRACT) E3.1.1 & E3.2.1
CREATE OPPORTUNITY HEADER E3.3.2
NOTIFICATION (E-MAIL OR OTHER) E5.1.1
INVITATION INTERFACE (I3)
CREATE INVITATION LIST FOR POTENTIAL SELLERS P3
INVITATION INTERFACE (I3) - OPTION 2A CREATE OPPORTUNITY INTERFACE USING R/3 WORKFLOW (R/3=QTY CONTRACT)
NOTIFICATION (R/3 WORKFLOW WITH QTY CONTRACT) E5.2.1
SEND INVITATION AND/OR ERP DETAIL DATA E4.1.1, E4.2.1 & E4.2.2
INVITATION INTERFACE (I3) - OPTION 2B CREATE OPPORTUNITY INTERFACE WITH NO R/3 WORKFLOW (R/3=QTY CONTRACT)
DEFINE OPPORTUNITY (Hdr) (R/3=QUANTITY CONTRACT) E5.2.1 (STEP2) OR E5.2.2
L
M
N
O
P
Q

FIG. 27D

(K)

INTERFACE 4 (I4) - MODIFY OPPORTUNITY (RESPONSE) INTERFACE

E7 SEND SELLERS RESPONSE TO AUCTION OWNER

E7.1 OPTION 1(R/3 EVENT)
E7.1.1 START UPDATE OPPORTUNITY INTERFACE TO CHANGE THE AUCTION OWNER´S RELATED QUANTITY CONTRACT FOR EACH SELLER

E7.2 OPTION 2 (NON-R/3 ERP EVENT)
E7.2.1 START UPDATE OPPORTUNITY INTERFACE TO CHANGE THE ERP DOCUMENT HELD FOR EACH SELLER

INTERFACE 5 (I5) - MODIFY OPPORTUNITY (TRADING EXCHANGE) INTERFACE

E8 RECEIVE OPPORTUNITY (TRADING EXCHANGE RESPONSE) FROM APPLICATION HOST

E8.1 OPTION 1 (R/3 EVENT)
E8.1.1 MODIFY THE AUCTION OWNER´S ´RELATED´QUANTITY CONTRACT FOR EACH SELLER.
E8.2 OPTION 2 (NON-R/3 ERP EVENT)-
E8.2.1 MODIFY THE AUCTION OWNER´S ERP DOCUMENT FOR SELLER

E9 GENERATE DEMAND - PRE-AUCTION NOTIFICATION
E9.1.1 BID INVITATIONS TO PRE-REGISTERED CLIENTS - START I3 INTERFACE
E9.1.2 ADVERTISEMENTS/NOTIFICATIONS/AGENT - START I6 INTERFACE

INTERFACE 3 (I3) - INVITATION INTERFACE

INTERFACE 6 (I6) - ANNOUNCEMENT INTERFACE

E10 TRADING EXCHANGE/AUCTION STARTS

E11 BUYERS (RESPONDENTS) DRAWN TO AUCTION BY ONE OF THREE OPTIONS
E11.1 Opt 1 - BID INVITATIONS
E11.2 Opt 2 - DEMAND SEARCH FROM PO OR BBP
E11.2.1 DEMAND EXISTS WITHIN AN APPROVED PURCHASE REQ
E11.2.2 SEARCH VENDER & AUCTION SITES (SEE P2 ABOVE)

E11.3 Opt 3 - ADS/BANNERS/ANNOUNCEMENTS/AGENTS

E12 BUYER ANALYZING AUCTION OPPORTUNITIES
E12.1 OPTION 1 (R/3 EVENT)
E12.1.1 LOAD DATA FROM APPLICATION HOST INTO A PURCHASING DOCUMENT (EITHER PO OR RFQ)
E12.1.2 ANALYZE INFORMATION TO ENSURE PROPER MATCH

(R)

FIG. 27E

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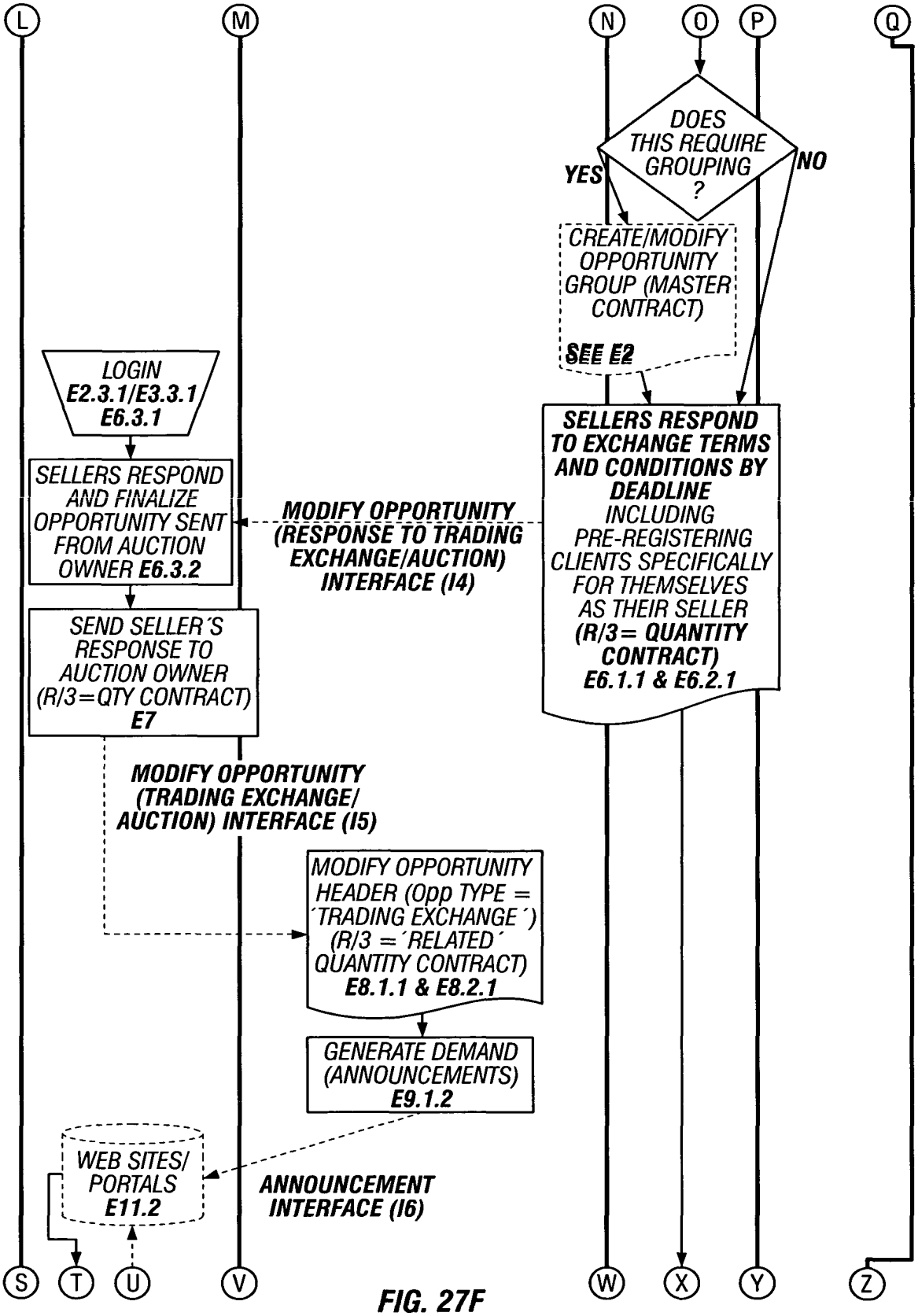
L
M
N
O
P
Q
DOES THIS REQUIRE GROUPING ?
YES
NO
CREATE/MODIFY OPPORTUNITY GROUP (MASTER CONTRACT)
SEE E2
LOGIN E2.3.1/E3.3.1 E6.3.1
SELLERS RESPOND AND FINALIZE OPPORTUNITY SENT FROM AUCTION OWNER E6.3.2
MODIFY OPPORTUNITY (RESPONSE TO TRADING EXCHANGE/AUCTION) INTERFACE (I4)
SELLERS RESPOND TO EXCHANGE TERMS AND CONDITIONS BY DEADLINE INCLUDING PRE-REGISTERING CLIENTS SPECIFICALLY FOR THEMSELVES AS THEIR SELLER (R/3= QUANTITY CONTRACT) E6.1.1 & E6.2.1
SEND SELLER'S RESPONSE TO AUCTION OWNER (R/3=QTY CONTRACT) E7
MODIFY OPPORTUNITY (TRADING EXCHANGE/ AUCTION) INTERFACE (I5)
MODIFY OPPORTUNITY HEADER (Opp TYPE = 'TRADING EXCHANGE') (R/3 = 'RELATED' QUANTITY CONTRACT) E8.1.1 & E8.2.1
GENERATE DEMAND (ANNOUNCEMENTS) E9.1.2
WEB SITES/ PORTALS E11.2
ANNOUNCEMENT INTERFACE (I6)
S
T
U
V
W
X
Y
Z

FIG. 27F

2704

R

E12.2 OPTION 2 (NON-R/3 ERP EVENT)
E12.2.1 LOAD DATA FROM APPLICATION HOST INTO A PURCHASING DOCUMENT (EITHER PO OR RFQ)
E12.2.2 ANALYZE INFORMATION TO ENSURE PROPER MATCH
E12.3 OPTION 3 (NON ERP)
E12.3.1 LOGIN (SEE E2.3.1)
E12.3.2 ANALYZE OPPORTUNITIES ON APPLICATION HOST

INTERFACE 7 (I7) - CREATE OPPORTUNITY (POTENTIAL BID) INTERFACE (THIS WAS PULLED IN BY THE BUYER IN E12)

E13 BUYER CREATES A BID OPPORTUNITY

E13.1/E13: USING ERP AS DRIVER (BOTH R/3 & NON-R/3 ERPS)
E13.1.1/E1: UPDATE PURCHASE DOCUMENT
E13.1.1/E1: START ´CREATE OPPORTUNITY (BID) INTERFACE´
E13.3 USING APPLICATION DIRECTLY ON THE INTERNET
E13.3.1 LOGIN INTO APPLICATION
E13.3.2 POST BID MANUALLY

INTERFACE 8 (I8) - CREATE OPPORTUNITY (BID)

E14 SELLERS ANALYZE BIDS ON APPLICATION HOST

E14.3.1 SELLERS LOGIN TO APPLICATION HOST (SEE E2.3.1)
E14.3.2 SELLERS ANALYZES AND VALIDATES BIDS
E14.3.3 ON THE APPLICATION SERVER, NOTIFY ANY BUYER OF PROBLEMS WITH THEIR BID, IF THEY VIOLATED ONE OR MORE OF THE TERMS AND CONDITIONS

E15 (OPTIONAL) START AGREEMENT/NEGOTIATION

INTERFACE 9 (I9): DRM INTERFACE (OPTIONAL) INTERFACE

E16 SELLER(S) SELECT WINNING BID(S) ON APP HOST

E16.1 SELECT WINNING BID ON APPLICATION HOST
E16.2 (ERP ONLY) START ´CREATE SALES ORDER INTERFACE´

INTERFACE 10 (I10) CREATE SALES ORDER INTERFACE

E17 RECEIVE SALES ORDER FOR LOGISTICS VERIFICATION

E17.1 FOR ERP SYSTEMS (BOTH R/3 AND NON-R/3)
E17.1.1 START ´CREATE SALES ORDER INTERFACE´ WITH
E17.1.2 FINAL VERIFICATION OF LOGISTICS DATA

AA

FIG. 27G

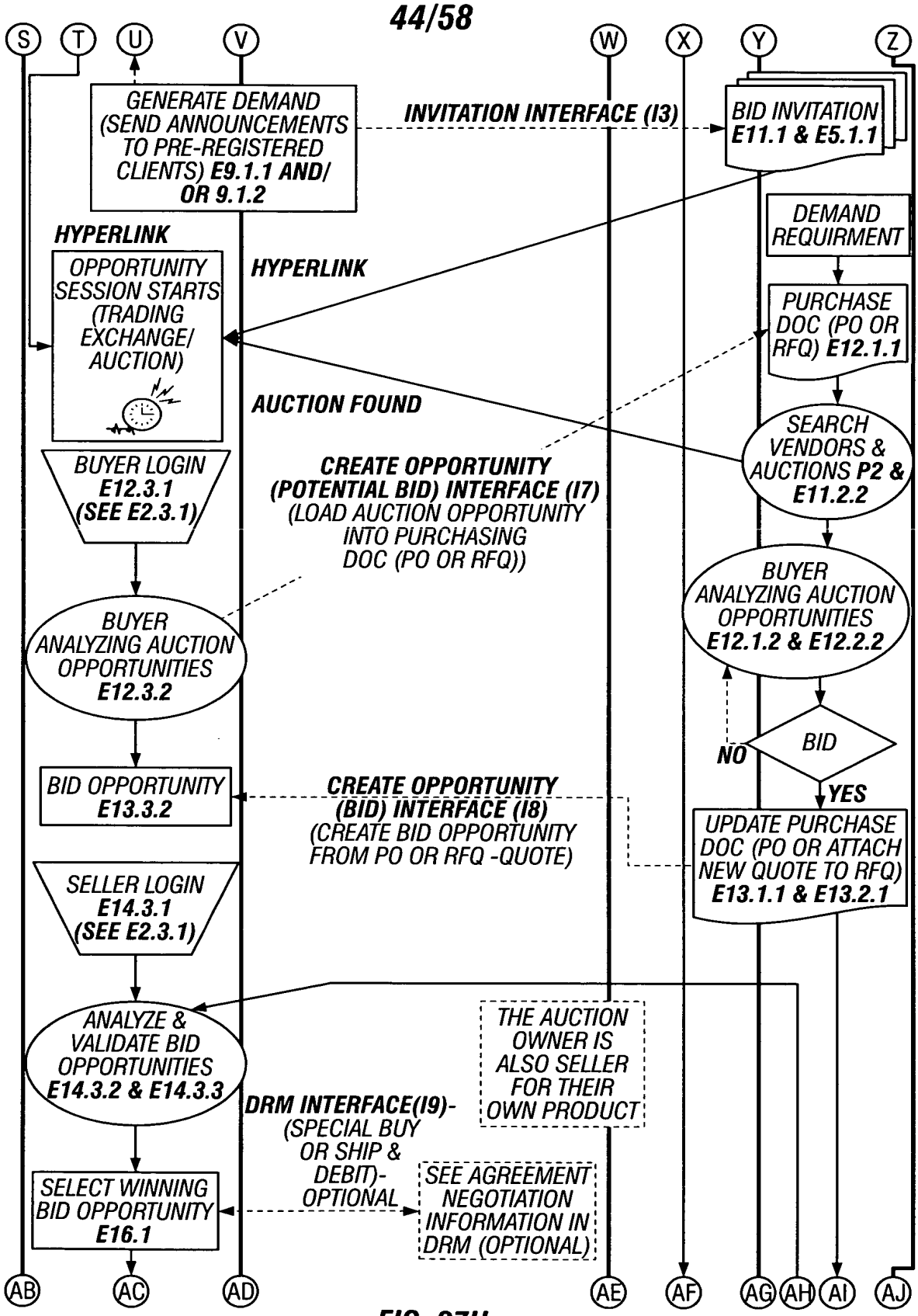
S
T
U
V
W
X
Y
Z
GENERATE DEMAND (SEND ANNOUNCEMENTS TO PRE-REGISTERED CLIENTS) E9.1.1 AND/ OR 9.1.2
INVITATION INTERFACE (I3)
BID INVITATION E11.1 & E5.1.1
DEMAND REQUIRMENT
HYPERLINK
HYPERLINK
OPPORTUNITY SESSION STARTS (TRADING EXCHANGE/ AUCTION)
PURCHASE DOC (PO OR RFQ) E12.1.1
AUCTION FOUND
SEARCH VENDORS & AUCTIONS P2 & E11.2.2
BUYER LOGIN E12.3.1 (SEE E2.3.1)
CREATE OPPORTUNITY (POTENTIAL BID) INTERFACE (I7) (LOAD AUCTION OPPORTUNITY INTO PURCHASING DOC (PO OR RFQ))
BUYER ANALYZING AUCTION OPPORTUNITIES E12.3.2
BUYER ANALYZING AUCTION OPPORTUNITIES E12.1.2 & E12.2.2
BID
NO
YES
BID OPPORTUNITY E13.3.2
CREATE OPPORTUNITY (BID) INTERFACE (I8) (CREATE BID OPPORTUNITY FROM PO OR RFQ -QUOTE)
UPDATE PURCHASE DOC (PO OR ATTACH NEW QUOTE TO RFQ) E13.1.1 & E13.2.1
SELLER LOGIN E14.3.1 (SEE E2.3.1)
ANALYZE & VALIDATE BID OPPORTUNITIES E14.3.2 & E14.3.3
THE AUCTION OWNER IS ALSO SELLER FOR THEIR OWN PRODUCT
DRM INTERFACE(I9)- (SPECIAL BUY OR SHIP & DEBIT)- OPTIONAL
SELECT WINNING BID OPPORTUNITY E16.1
SEE AGREEMENT NEGOTIATION INFORMATION IN DRM (OPTIONAL)
AB
AC
AD
AE
AF
AG
AH
AI
AJ

FIG. 27H

AA 2706

E17.1.2.1 IF OK
E17.1.2.1.1 -SAVE SALES ORDER AS FINAL
E17.1.2.1.2 -SEND ACKNOWLEDGEMENT
E17.1.2.2 IF NOT OK:
E17.1.2.2.1 -MANUALLY CORRECT AND GOTO E17.1.2.1.1
E17.1.2.2.2 -IF NOT ABLE TO CORRECT, THEN REJECT AND GOTO E14.3.2 & E14.3.3
E17.2 FOR NON-ERP SYSTEMS
E17.2.1 MANUALLY VERIFY ALL BID DATA
E17.2.2 ACCEPT AND CONFIRM BID ON APP HOST

INTERFACE 11 (I11) SALES ORDER CONFIRMATION INTERFACE

E18 RECEIVE SALES ORDER CONFIRMATION ON APPLICATION HOST

E18.1 OPTION 1(R/3 EVENT)
E18.1.1 START ´CREATE/MODIFY OPPORTUNITY (PO) INTERFACE´
E18.1.2 START ´MODIFY OPPORTUNITY (RELATED DOCS) INTERFACE´ FOR AUCTION OWNER
E18.1.3 START ´UPDATE SELLER INVENTORY (+,-) INTERFACE FOR AUCTION OWNER

E18.2 OPTION 2 (NON-R/3 ERP EVENT)-
E18.2.1 START ´CREATE/MODIFY OPPORTUNITY (PO) INTERFACE´
E18.2.2 START ´MODIFY OPPORTUNITY (RELATED DOCS) INTERFACE´ FOR AUCTION OWNER
E18.2.3 START ´UPDATE SELLER DR INVENTORY (+,-) INTERFACE FOR AUCTION OWNER
INTERFACE´ FOR AUCTION OWNER
E18.3 OPTION 2 (NON-R/3 ERP EVENT)
E18.3.1 BUYER ONLY WANTS A MESSAGE FOR PO.
E18.3.2 AUCTION OWNER DOES NOT WANT ERP DOCUMENTS
E18.3.2.1 OPTION A - SEND MESSAGE BASED ON PROFILE

AK

FIG. 27I

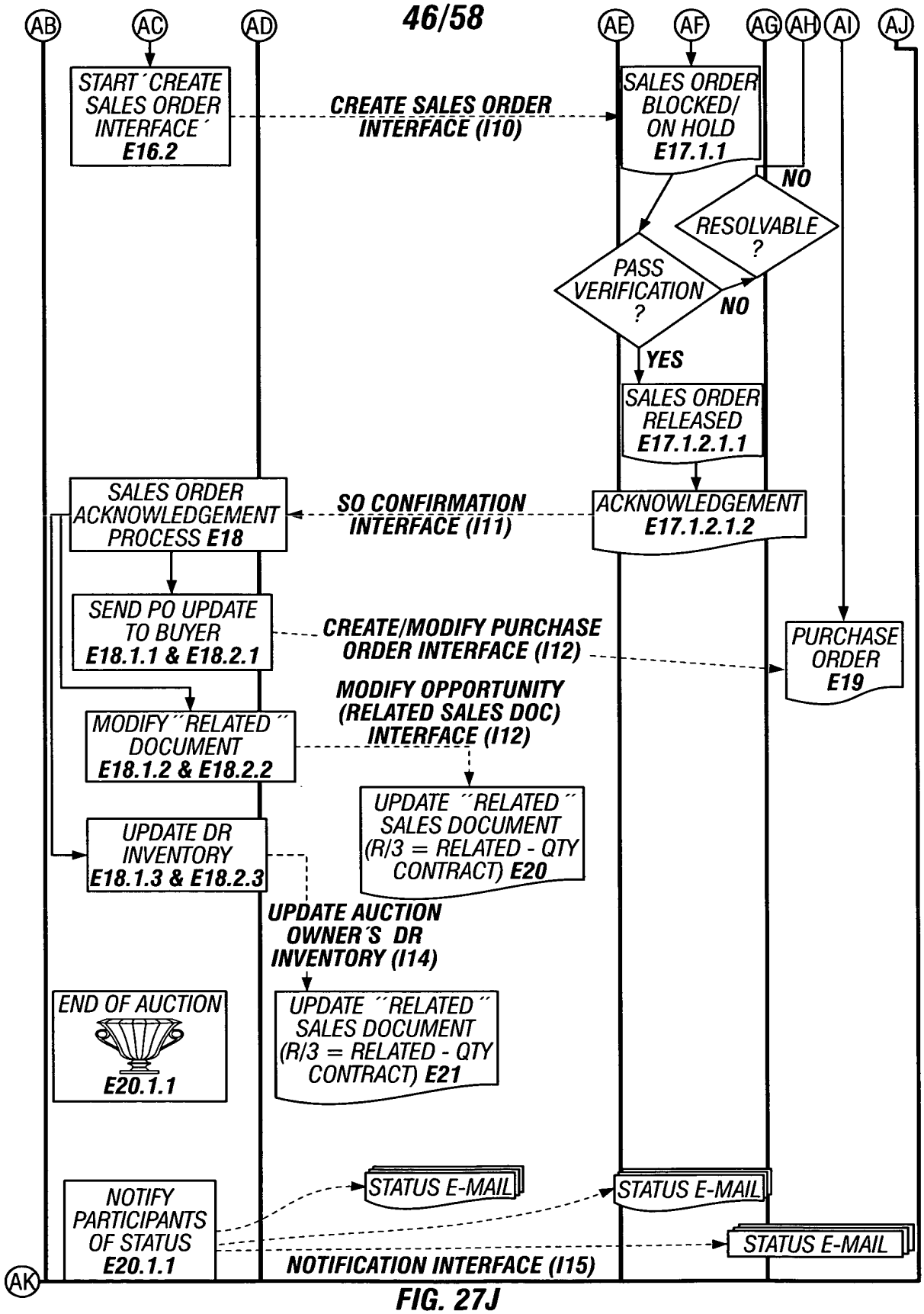
AB
AC
AD
AE
AF
AG
AH
AI
AJ
START "CREATE SALES ORDER INTERFACE" E16.2
CREATE SALES ORDER INTERFACE (I10)
SALES ORDER BLOCKED/ ON HOLD E17.1.1
NO
RESOLVABLE ?
PASS VERIFICATION ?
NO
YES
SALES ORDER RELEASED E17.1.2.1.1
SALES ORDER ACKNOWLEDGEMENT PROCESS E18
SO CONFIRMATION INTERFACE (I11)
ACKNOWLEDGEMENT E17.1.2.1.2
SEND PO UPDATE TO BUYER E18.1.1 & E18.2.1
CREATE/MODIFY PURCHASE ORDER INTERFACE (I12)
PURCHASE ORDER E19
MODIFY "RELATED" DOCUMENT E18.1.2 & E18.2.2
MODIFY OPPORTUNITY (RELATED SALES DOC) INTERFACE (I12)
UPDATE "RELATED" SALES DOCUMENT (R/3 = RELATED - QTY CONTRACT) E20
UPDATE DR INVENTORY E18.1.3 & E18.2.3
UPDATE AUCTION OWNER'S DR INVENTORY (I14)
END OF AUCTION E20.1.1
UPDATE "RELATED" SALES DOCUMENT (R/3 = RELATED - QTY CONTRACT) E21
STATUS E-MAIL
STATUS E-MAIL
NOTIFY PARTICIPANTS OF STATUS E20.1.1
STATUS E-MAIL
NOTIFICATION INTERFACE (I15)
AK

FIG. 27J

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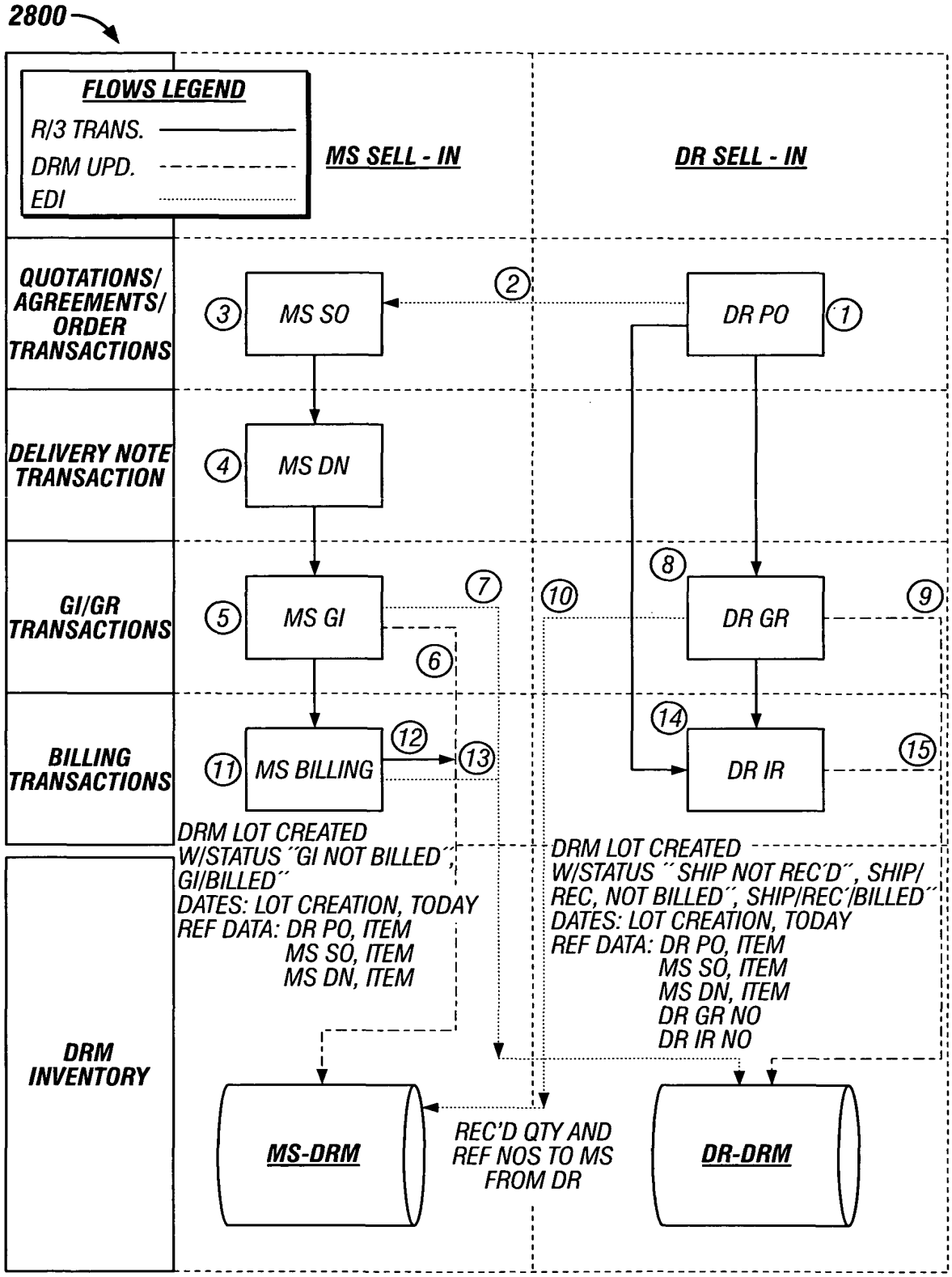
2800
FLOWS LEGEND
R/3 TRANS.
DRM UPD.
EDI
MS SELL - IN
DR SELL - IN
QUOTATIONS/ AGREEMENTS/ ORDER TRANSACTIONS
DELIVERY NOTE TRANSACTION
GI/GR TRANSACTIONS
BILLING TRANSACTIONS
DRM INVENTORY
MS SO
DR PO
MS DN
MS GI
DR GR
MS BILLING
DR IR
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
DRM LOT CREATED W/STATUS "GI NOT BILLED", GI/BILLED"
DATES: LOT CREATION, TODAY
REF DATA: DR PO, ITEM
MS SO, ITEM
MS DN, ITEM
DRM LOT CREATED W/STATUS " SHIP NOT REC'D", SHIP/ REC, NOT BILLED", SHIP/REC'/BILLED"
DATES: LOT CREATION, TODAY
REF DATA: DR PO, ITEM
MS SO, ITEM
MS DN, ITEM
DR GR NO
DR IR NO
MS-DRM
REC'D QTY AND REF NOS TO MS FROM DR
DR-DRM

FIG. 28

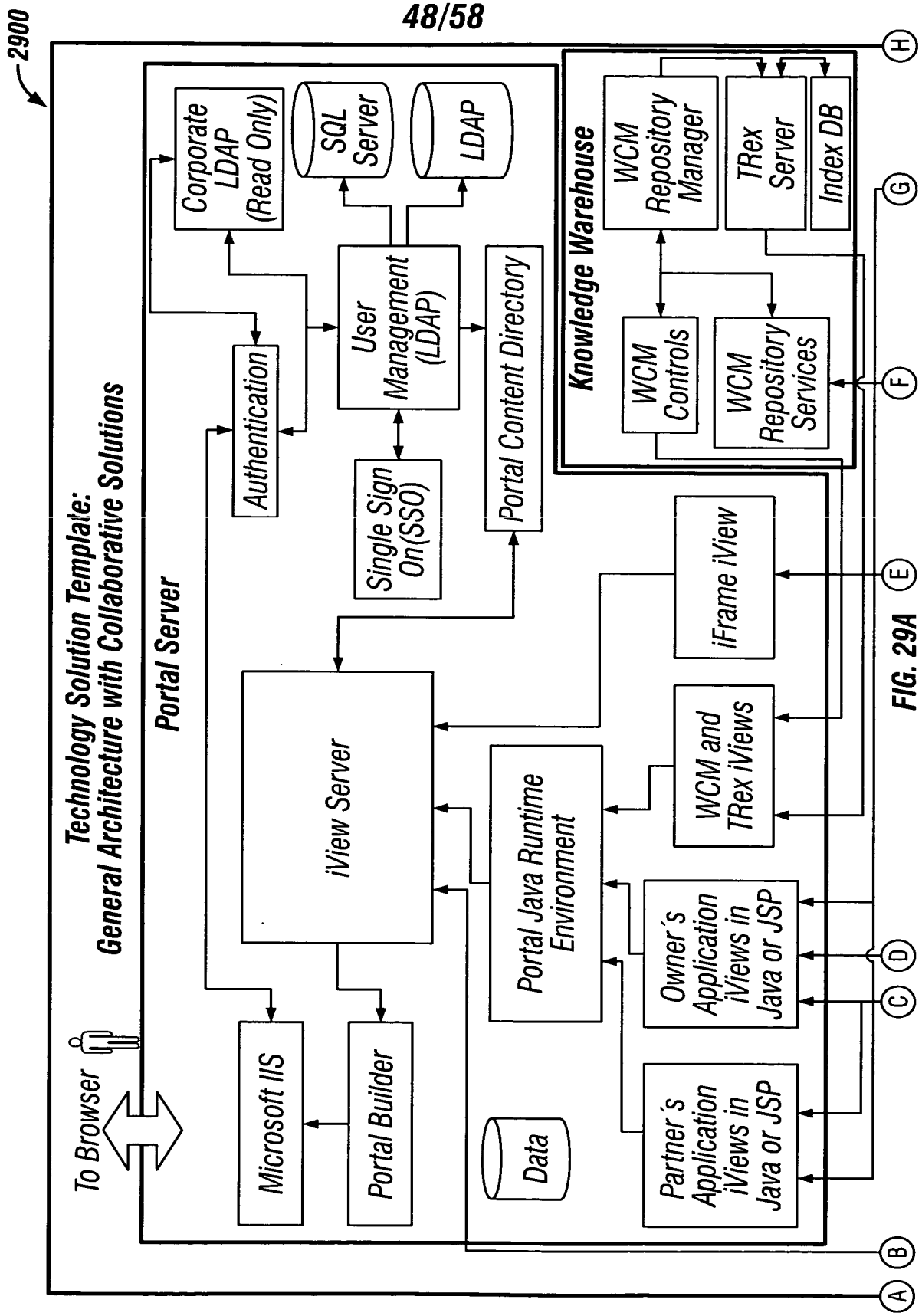
2900
Technology Solution Template:
General Architecture with Collaborative Solutions
Portal Server
Knowledge Warehouse
Corporate LDAP (Read Only)
SQL Server
LDAP
WCM Repository Manager
TRex Server
Index DB
Authentication
User Management (LDAP)
Portal Content Directory
WCM Controls
WCM Repository Services
Single Sign On(SSO)
iFrame iView
iView Server
WCM and TRex iViews
Portal Java Runtime Environment
Owner's Application iViews in Java or JSP
Partner's Application iViews in Java or JSP
Microsoft IIS
Portal Builder
Data
To Browser
A
B
C
D
E
F
G
H

FIG. 29A

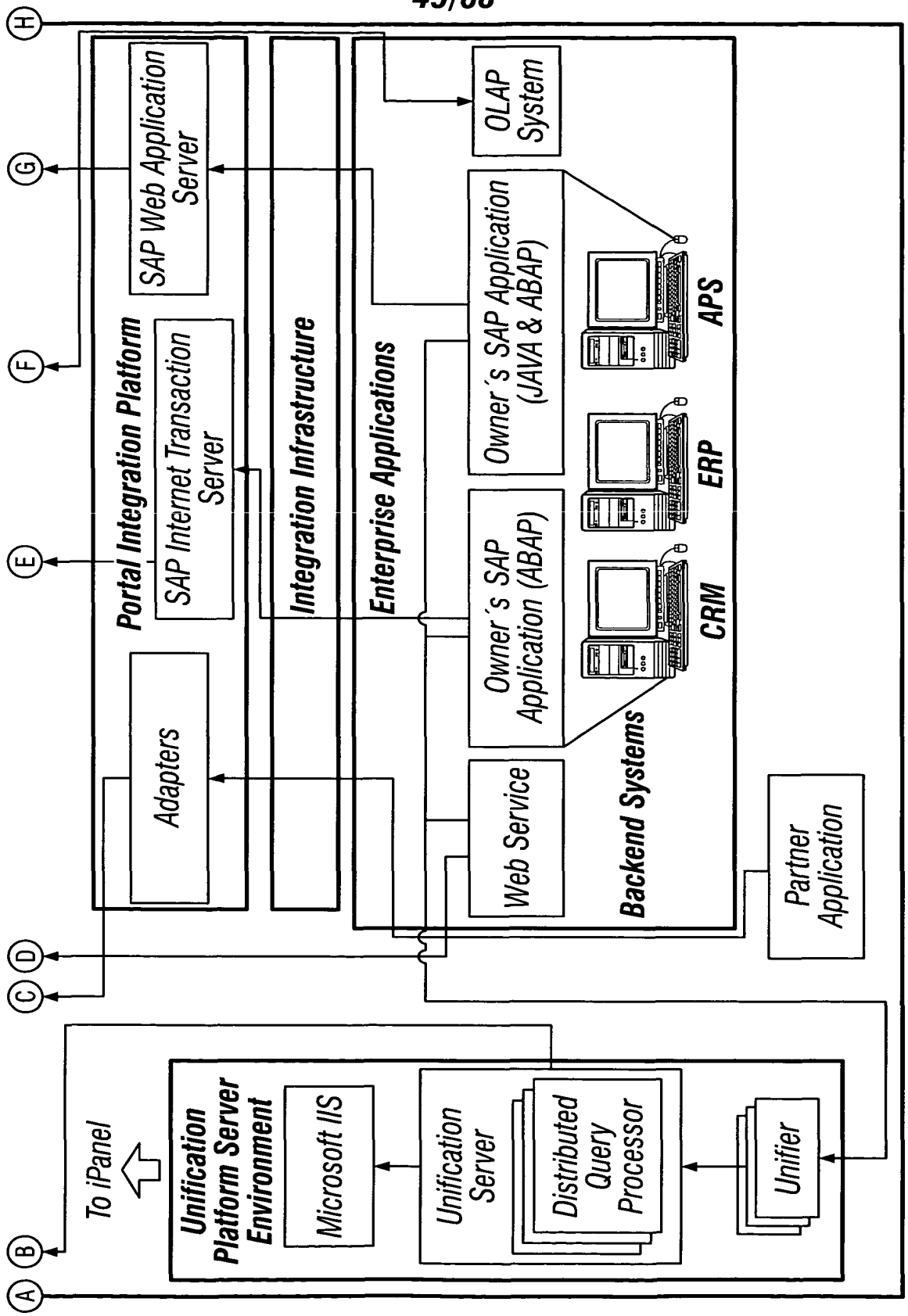
A
B
C
D
E
F
G
H
To iPanel
Unification Platform Server Environment
Microsoft IIS
Unification Server
Distributed Query Processor
Unifier
Portal Integration Platform
Adapters
SAP Internet Transaction Server
SAP Web Application Server
Integration Infrastructure
Enterprise Applications
Web Service
Owner´s SAP Application (ABAP)
Owner´s SAP Application (JAVA & ABAP)
OLAP System
Backend Systems
CRM
ERP
APS
Partner Application

FIG. 29B

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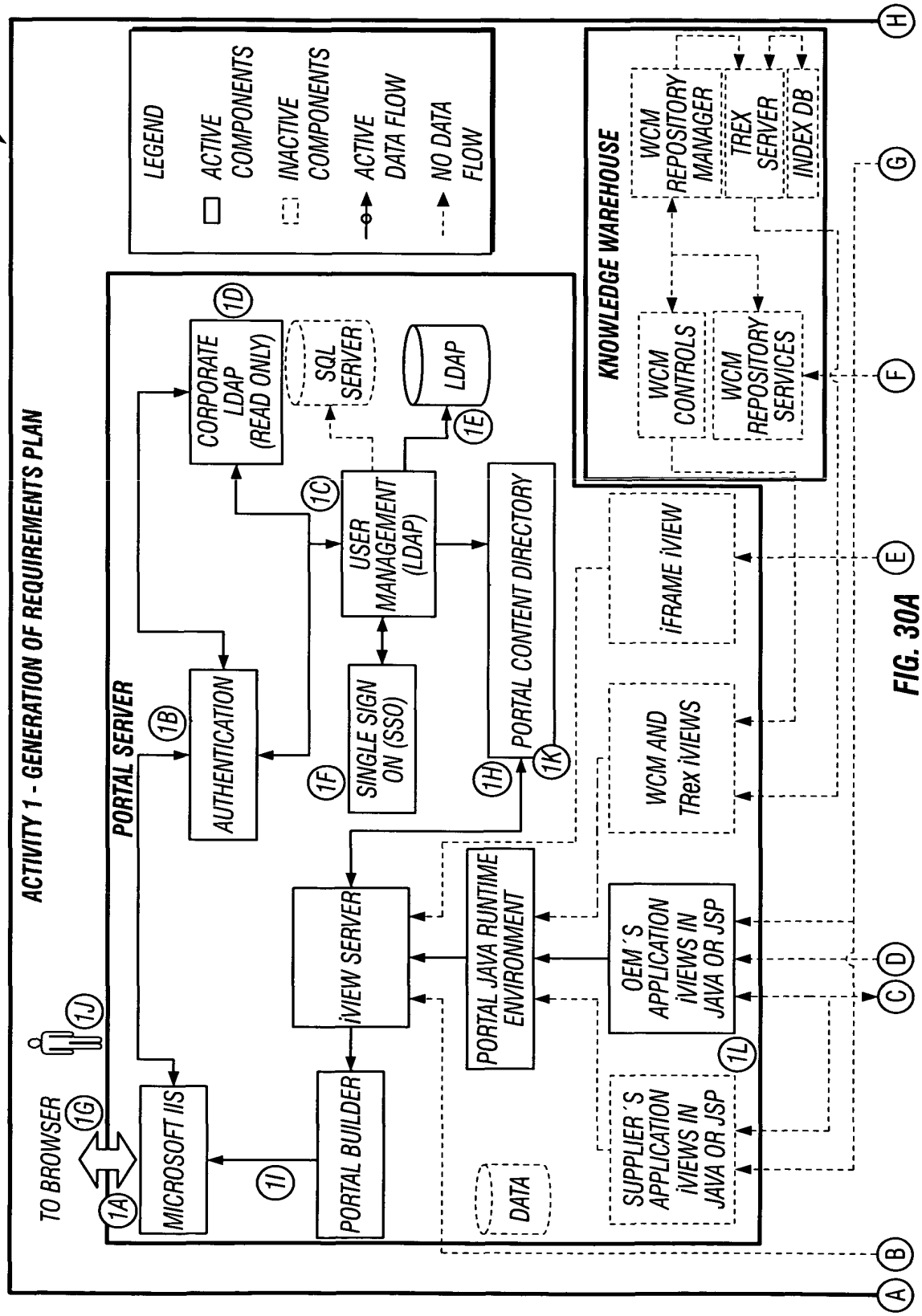
3000
ACTIVITY 1 - GENERATION OF REQUIREMENTS PLAN
LEGEND
ACTIVE COMPONENTS
INACTIVE COMPONENTS
ACTIVE DATA FLOW
NO DATA FLOW
KNOWLEDGE WAREHOUSE
WCM REPOSITORY MANAGER
TREX SERVER
INDEX DB
WCM CONTROLS
WCM REPOSITORY SERVICES
PORTAL SERVER
CORPORATE LDAP (READ ONLY)
SQL SERVER
LDAP
USER MANAGEMENT (LDAP)
PORTAL CONTENT DIRECTORY
AUTHENTICATION
SINGLE SIGN ON (SSO)
iFRAME iVIEW
WCM AND TRex iVIEWS
iVIEW SERVER
PORTAL JAVA RUNTIME ENVIRONMENT
OEM'S APPLICATION iVIEWS IN JAVA OR JSP
SUPPLIER'S APPLICATION iVIEWS IN JAVA OR JSP
MICROSOFT IIS
PORTAL BUILDER
DATA
TO BROWSER
1A
1B
1C
1D
1E
1F
1G
1H
1I
1J
1K
1L
A
B
C
D
E
F
G
H

FIG. 30A

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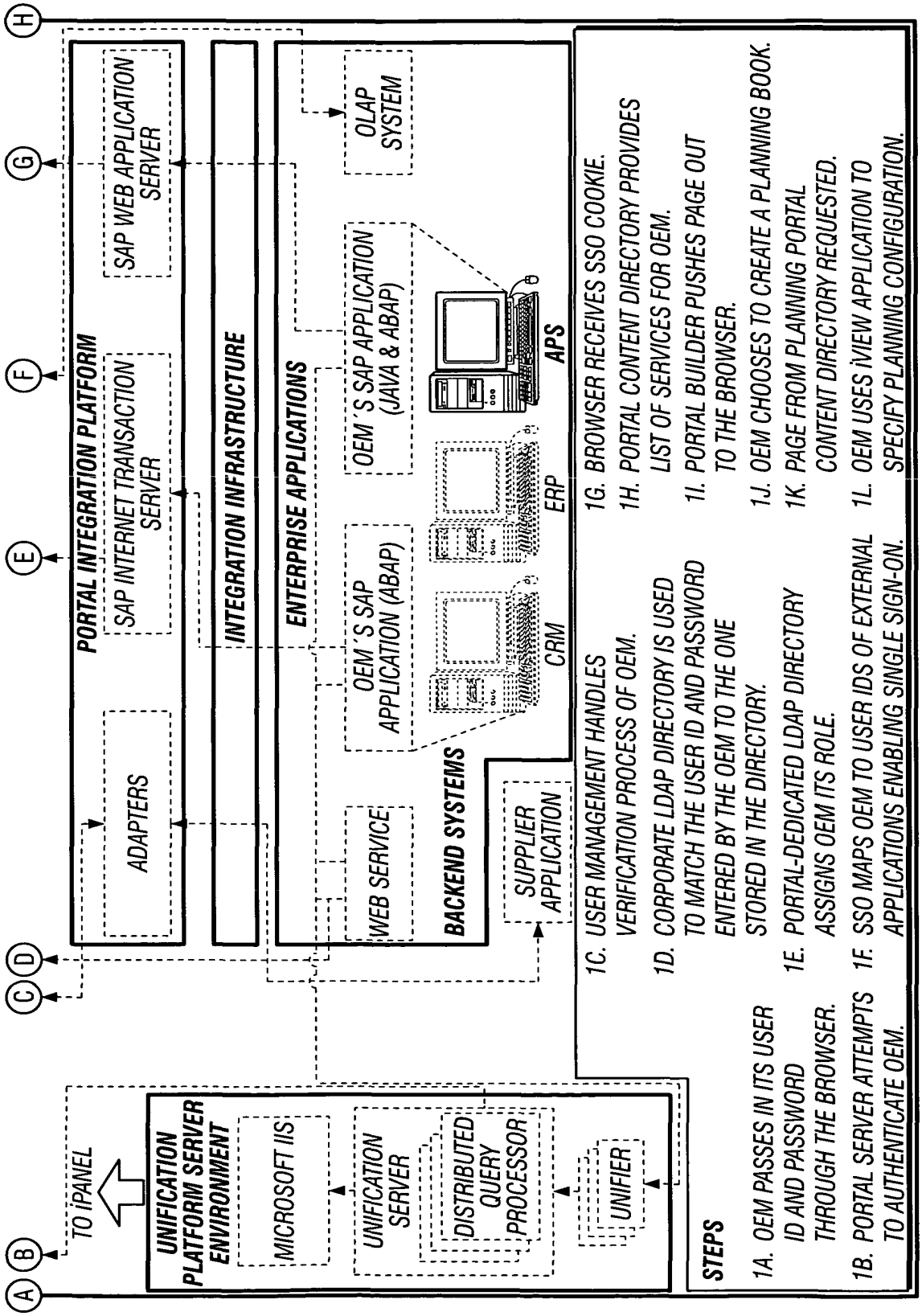
A
B
C
D
E
F
G
H
TO iPANEL
UNIFICATION PLATFORM SERVER ENVIRONMENT
MICROSOFT IIS
UNIFICATION SERVER
DISTRIBUTED QUERY PROCESSOR
UNIFIER
PORTAL INTEGRATION PLATFORM
ADAPTERS
SAP INTERNET TRANSACTION SERVER
SAP WEB APPLICATION SERVER
INTEGRATION INFRASTRUCTURE
ENTERPRISE APPLICATIONS
OEM 'S SAP APPLICATION (ABAP)
OEM 'S SAP APPLICATION (JAVA & ABAP)
OLAP SYSTEM
BACKEND SYSTEMS
WEB SERVICE
SUPPLIER APPLICATION
CRM
ERP
APS
STEPS
1A. OEM PASSES IN ITS USER ID AND PASSWORD THROUGH THE BROWSER.
1B. PORTAL SERVER ATTEMPTS TO AUTHENTICATE OEM.
1C. USER MANAGEMENT HANDLES VERIFICATION PROCESS OF OEM.
1D. CORPORATE LDAP DIRECTORY IS USED TO MATCH THE USER ID AND PASSWORD ENTERED BY THE OEM TO THE ONE STORED IN THE DIRECTORY.
1E. PORTAL-DEDICATED LDAP DIRECTORY ASSIGNS OEM ITS ROLE.
1F. SSO MAPS OEM TO USER IDS OF EXTERNAL APPLICATIONS ENABLING SINGLE SIGN-ON.
1G. BROWSER RECEIVES SSO COOKIE.
1H. PORTAL CONTENT DIRECTORY PROVIDES LIST OF SERVICES FOR OEM.
1I. PORTAL BUILDER PUSHES PAGE OUT TO THE BROWSER.
1J. OEM CHOOSES TO CREATE A PLANNING BOOK.
1K. PAGE FROM PLANNING PORTAL CONTENT DIRECTORY REQUESTED.
1L. OEM USES iVIEW APPLICATION TO SPECIFY PLANNING CONFIGURATION.

FIG. 30B

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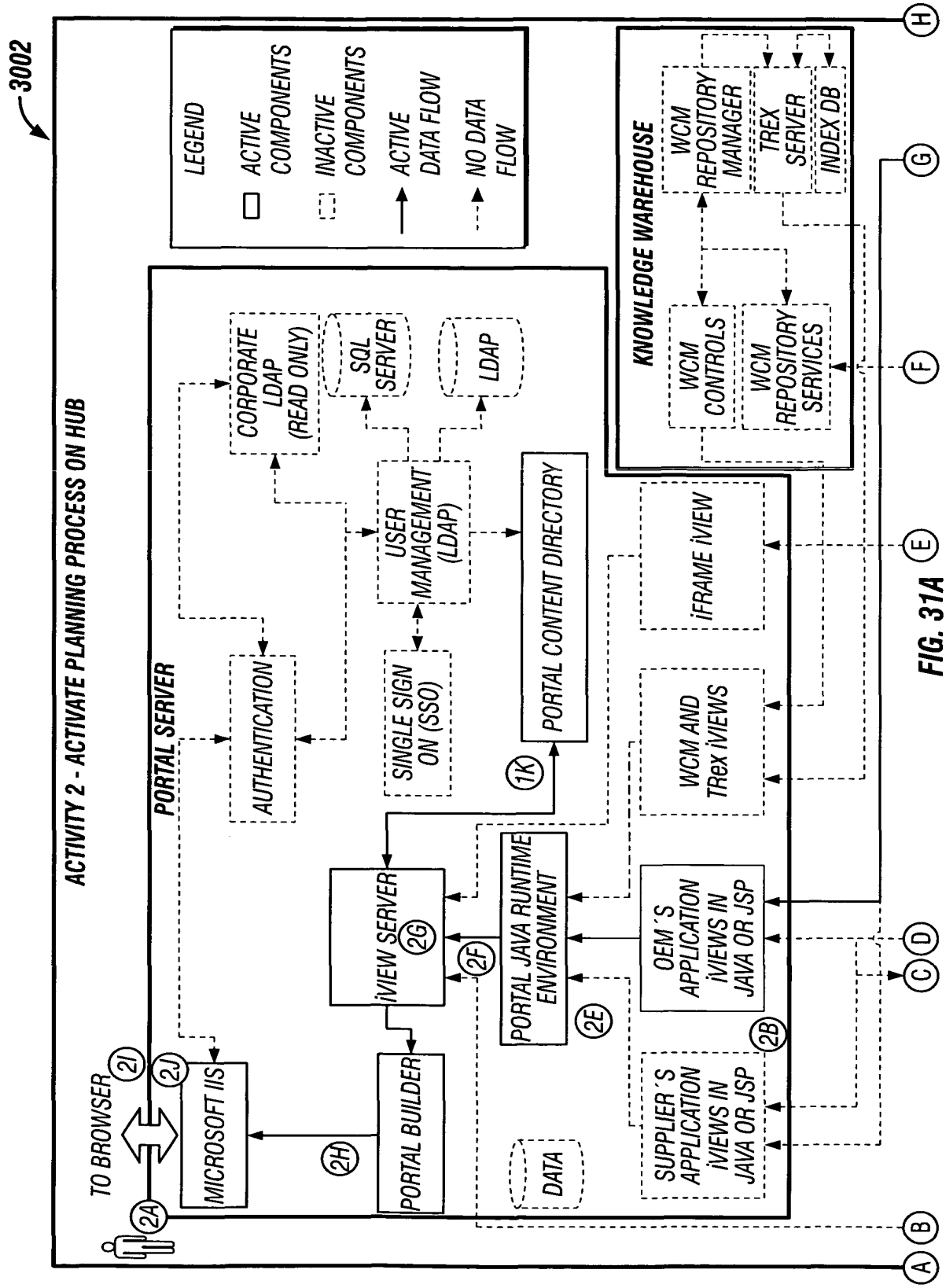

3002
ACTIVITY 2 - ACTIVATE PLANNING PROCESS ON HUB
LEGEND
ACTIVE COMPONENTS
INACTIVE COMPONENTS
ACTIVE DATA FLOW
NO DATA FLOW
KNOWLEDGE WAREHOUSE
WCM REPOSITORY MANAGER
TREX SERVER
INDEX DB
WCM CONTROLS
WCM REPOSITORY SERVICES
PORTAL SERVER
CORPORATE LDAP (READ ONLY)
SQL SERVER
LDAP
USER MANAGEMENT (LDAP)
PORTAL CONTENT DIRECTORY
iFRAME iVIEW
AUTHENTICATION
SINGLE SIGN ON (SSO)
WCM AND TRex iVIEWS
iVIEW SERVER
PORTAL JAVA RUNTIME ENVIRONMENT
OEM´S APPLICATION iVIEWS IN JAVA OR JSP
TO BROWSER
MICROSOFT IIS
PORTAL BUILDER
DATA
SUPPLIER´S APPLICATION iVIEWS IN JAVA OR JSP
2A
2B
2E
2F
2G
2H
2I
2J
1K
A
B
C
D
E
F
G
H

FIG. 31A

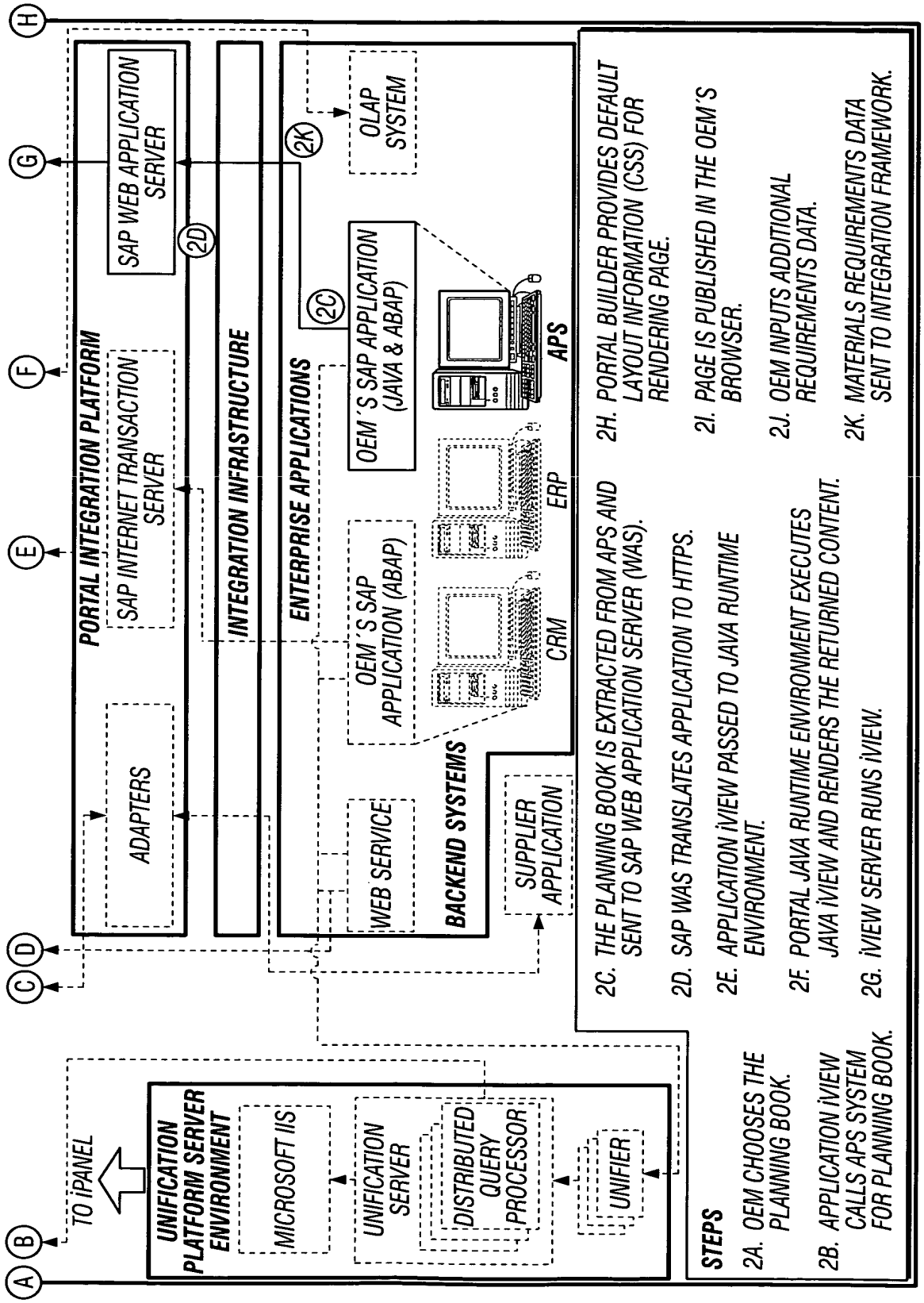
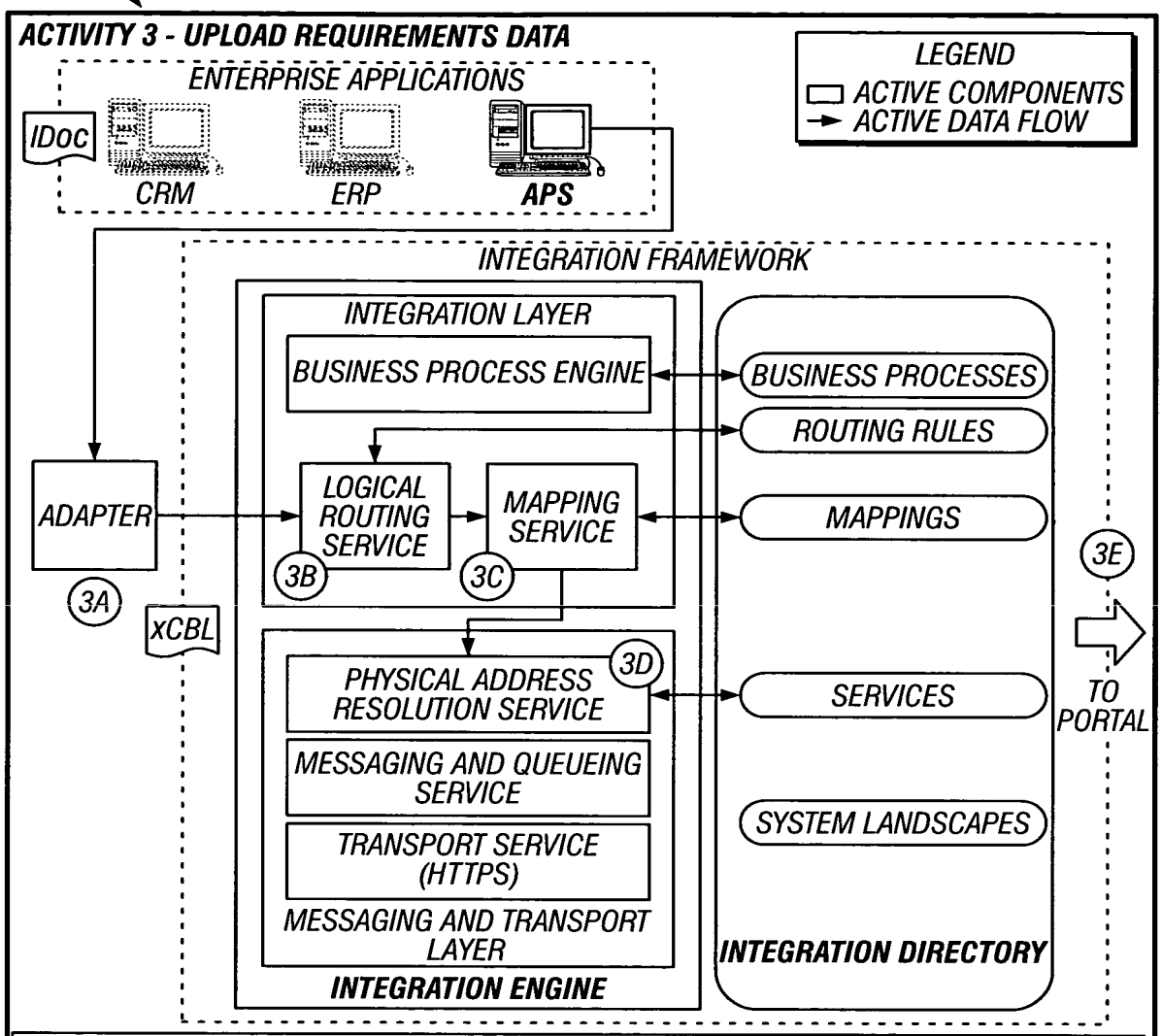

A
B
C
D
E
F
G
H
TO iPANEL
UNIFICATION PLATFORM SERVER ENVIRONMENT
MICROSOFT IIS
UNIFICATION SERVER
DISTRIBUTED QUERY PROCESSOR
UNIFIER
PORTAL INTEGRATION PLATFORM
ADAPTERS
SAP INTERNET TRANSACTION SERVER
SAP WEB APPLICATION SERVER
INTEGRATION INFRASTRUCTURE
ENTERPRISE APPLICATIONS
OEM´S SAP APPLICATION (ABAP)
OEM´S SAP APPLICATION (JAVA & ABAP)
OLAP SYSTEM
BACKEND SYSTEMS
WEB SERVICE
SUPPLIER APPLICATION
CRM
ERP
APS
2C
2D
2K
STEPS
2A. OEM CHOOSES THE PLANNING BOOK.
2B. APPLICATION iVIEW CALLS APS SYSTEM FOR PLANNING BOOK.
2C. THE PLANNING BOOK IS EXTRACTED FROM APS AND SENT TO SAP WEB APPLICATION SERVER (WAS).
2D. SAP WAS TRANSLATES APPLICATION TO HTTPS.
2E. APPLICATION iVIEW PASSED TO JAVA RUNTIME ENVIRONMENT.
2F. PORTAL JAVA RUNTIME ENVIRONMENT EXECUTES JAVA iVIEW AND RENDERS THE RETURNED CONTENT.
2G. iVIEW SERVER RUNS iVIEW.
2H. PORTAL BUILDER PROVIDES DEFAULT LAYOUT INFORMATION (CSS) FOR RENDERING PAGE.
2I. PAGE IS PUBLISHED IN THE OEM´S BROWSER.
2J. OEM INPUTS ADDITIONAL REQUIREMENTS DATA.
2K. MATERIALS REQUIREMENTS DATA SENT TO INTEGRATION FRAMEWORK.

FIG. 31B



STEPS

3A. THE MATERIALS REQUIREMENTS DATA, AN iDOC, IS SENT BY THE OEM'S APS SYSTEM TO AN ADAPTER, WHICH ENTERS THE MESSAGE INTO THE INTEGRATION PROCESSING CYCLE IN THE FORM OF AN xCBL MESSAGE.

3B. IN THE LOGICAL ROUTING STEP, THE LOGICAL ROUTING SERVICE REFERENCES THE INTEGRATION DIRECTORY TO DETERMINE THE LOGICAL RECEIVER OF THE MESSAGE USING THE OEM, MESSAGE TYPE, AND MESSAGE CONTENT TO FIND THE CORRECT RECEIVER.

3C. BASED ON THE RECEIVER DETERMINATION, THE MAPPING SERVICE ACQUIRES THE MAPPINGS FROM THE DIRECTORY AND THE DOCUMENT IS MAPPED FROM THE OEM'S xCBL FORMAT TO A TARGET DOCUMENT FOR THE SUPPLIER WHICH IS IN THE SUPPLIER'S XML FORMAT; THIS MAPPING INCLUDES FORMAT TRANSFORMATION AS WELL AS VALUE MAPPING.

3D. IN THE ADDRESS RESOLUTION STEP, THE PHYSICAL ADDRESS RESOLUTION SERVICE REFERENCES THE DIRECTORY TO OBTAIN THE PHYSICAL ADDRESS AND PROTOCOL REQUIREMENTS FOR THE SUPPLIER, AND THE FINAL TARGET DOCUMENT IS CREATED.

3E. THE TARGET DOCUMENT IS PASSED TO THE COLLABORATION HUB TO BE STORED IN A LOCAL DATABASE UNTIL REQUESTED BY THE SUPPLIER.

FIG. 32

55/58

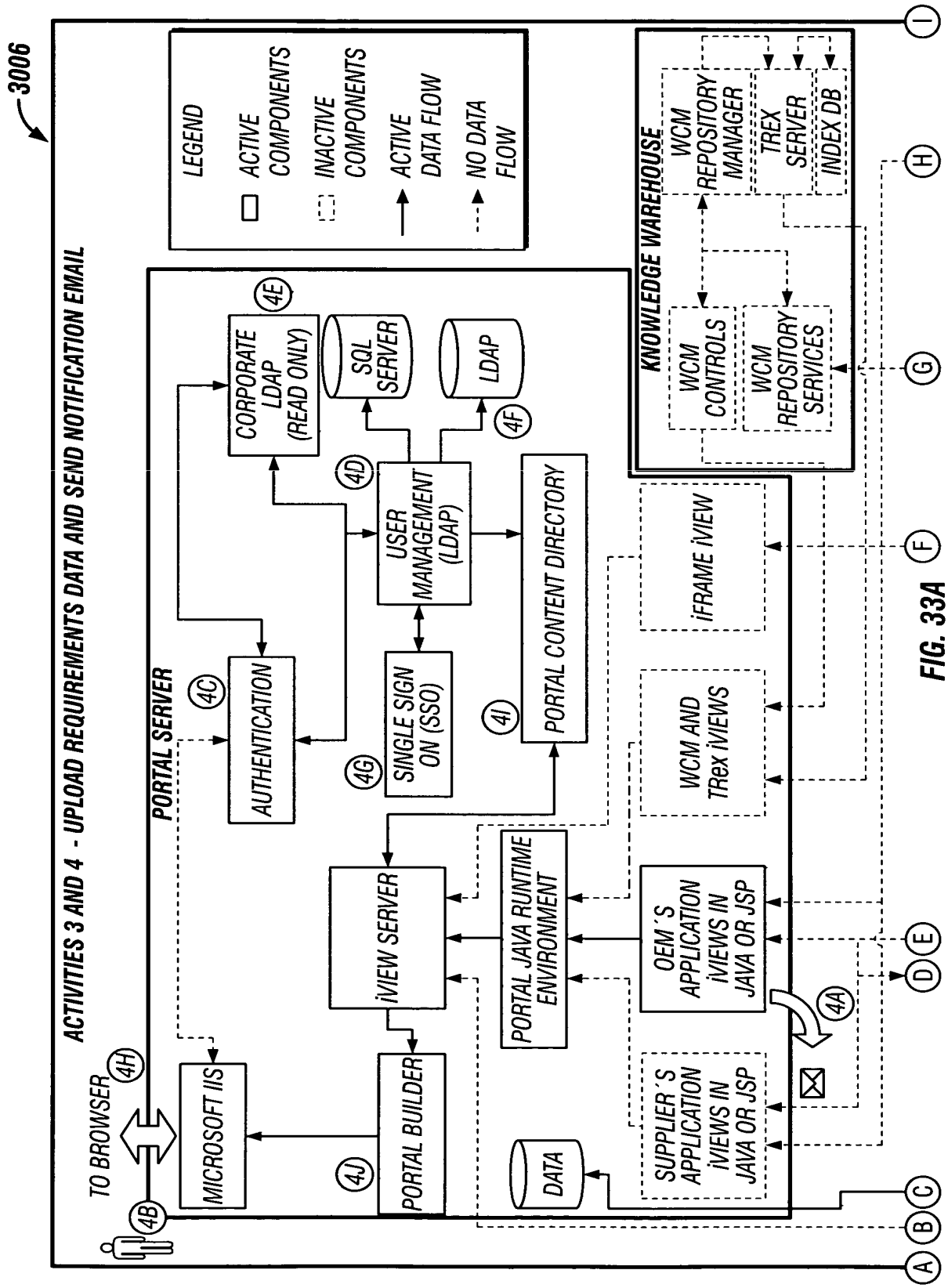

3006
ACTIVITIES 3 AND 4 - UPLOAD REQUIREMENTS DATA AND SEND NOTIFICATION EMAIL
LEGEND
ACTIVE COMPONENTS
INACTIVE COMPONENTS
ACTIVE DATA FLOW
NO DATA FLOW
PORTAL SERVER
KNOWLEDGE WAREHOUSE
WCM REPOSITORY MANAGER
TREX SERVER
INDEX DB
WCM CONTROLS
WCM REPOSITORY SERVICES
CORPORATE LDAP (READ ONLY)
SQL SERVER
LDAP
USER MANAGEMENT (LDAP)
PORTAL CONTENT DIRECTORY
AUTHENTICATION
SINGLE SIGN ON (SSO)
iFRAME iVIEW
WCM AND TRex iVIEWS
iVIEW SERVER
PORTAL JAVA RUNTIME ENVIRONMENT
OEM´S APPLICATION iVIEWS IN JAVA OR JSP
SUPPLIER´S APPLICATION iVIEWS IN JAVA OR JSP
MICROSOFT IIS
PORTAL BUILDER
DATA
TO BROWSER
4A
4B
4C
4D
4E
4F
4G
4H
4I
4J
A
B
C
D
E
F
G
H
I

FIG. 33A

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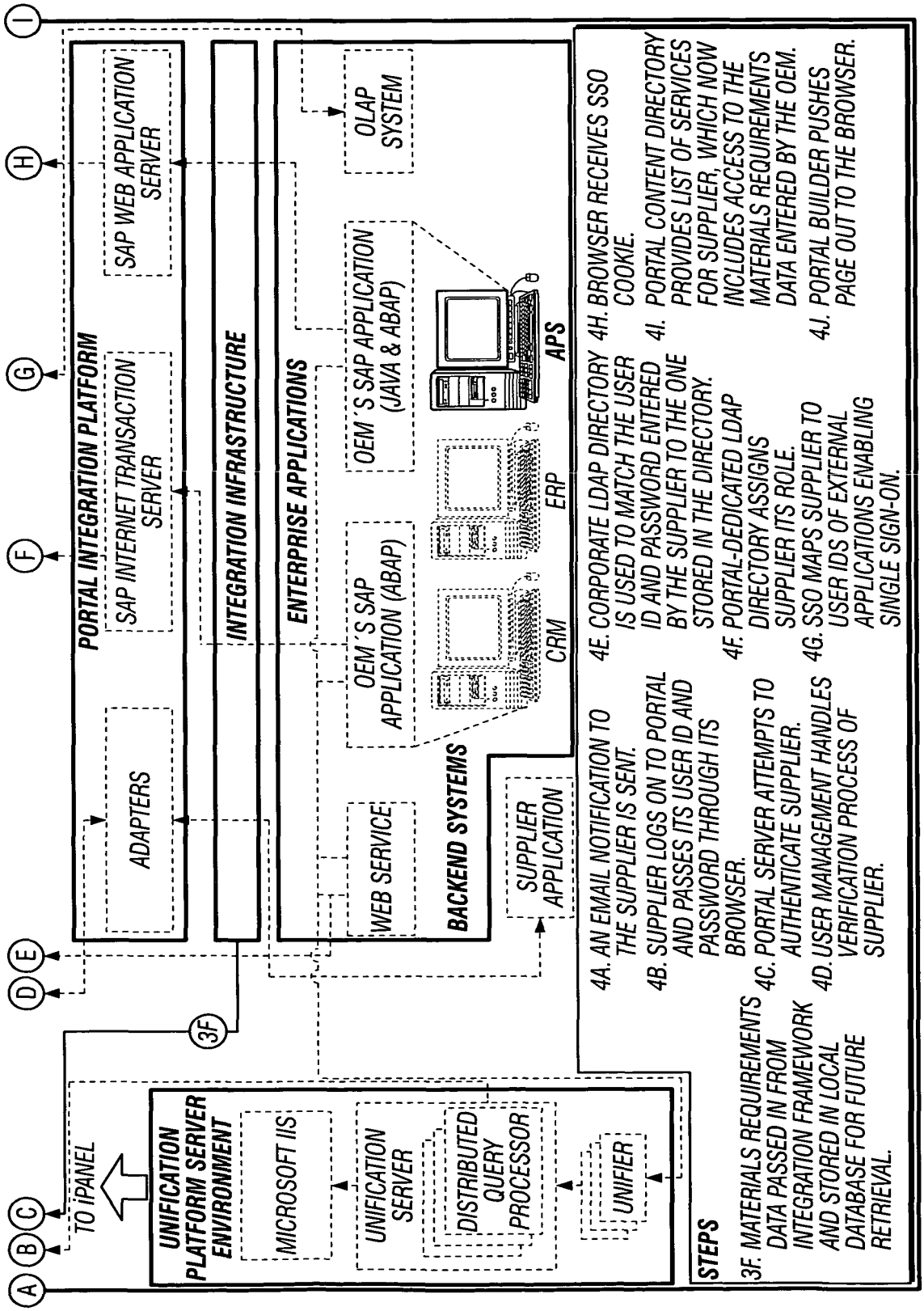
A
B
C
TO iPANEL
UNIFICATION PLATFORM SERVER ENVIRONMENT
MICROSOFT IIS
UNIFICATION SERVER
DISTRIBUTED QUERY PROCESSOR
UNIFIER
D
E
3F
PORTAL INTEGRATION PLATFORM
ADAPTERS
SAP INTERNET TRANSACTION SERVER
SAP WEB APPLICATION SERVER
F
INTEGRATION INFRASTRUCTURE
G
ENTERPRISE APPLICATIONS
OEM´S SAP APPLICATION (ABAP)
OEM´S SAP APPLICATION (JAVA & ABAP)
OLAP SYSTEM
H
I
BACKEND SYSTEMS
WEB SERVICE
SUPPLIER APPLICATION
CRM
ERP
APS
STEPS
3F. MATERIALS REQUIREMENTS DATA PASSED IN FROM INTEGRATION FRAMEWORK AND STORED IN LOCAL DATABASE FOR FUTURE RETRIEVAL.
4A. AN EMAIL NOTIFICATION TO THE SUPPLIER IS SENT.
4B. SUPPLIER LOGS ON TO PORTAL AND PASSES ITS USER ID AND PASSWORD THROUGH ITS BROWSER.
4C. PORTAL SERVER ATTEMPTS TO AUTHENTICATE SUPPLIER.
4D. USER MANAGEMENT HANDLES VERIFICATION PROCESS OF SUPPLIER.
4E. CORPORATE LDAP DIRECTORY IS USED TO MATCH THE USER ID AND PASSWORD ENTERED BY THE SUPPLIER TO THE ONE STORED IN THE DIRECTORY.
4F. PORTAL-DEDICATED LDAP DIRECTORY ASSIGNS SUPPLIER ITS ROLE.
4G. SSO MAPS SUPPLIER TO USER IDS OF EXTERNAL APPLICATIONS ENABLING SINGLE SIGN-ON.
4H. BROWSER RECEIVES SSO COOKIE.
4I. PORTAL CONTENT DIRECTORY PROVIDES LIST OF SERVICES FOR SUPPLIER, WHICH NOW INCLUDES ACCESS TO THE MATERIALS REQUIREMENTS DATA ENTERED BY THE OEM.
4J. PORTAL BUILDER PUSHES PAGE OUT TO THE BROWSER.

FIG. 33B

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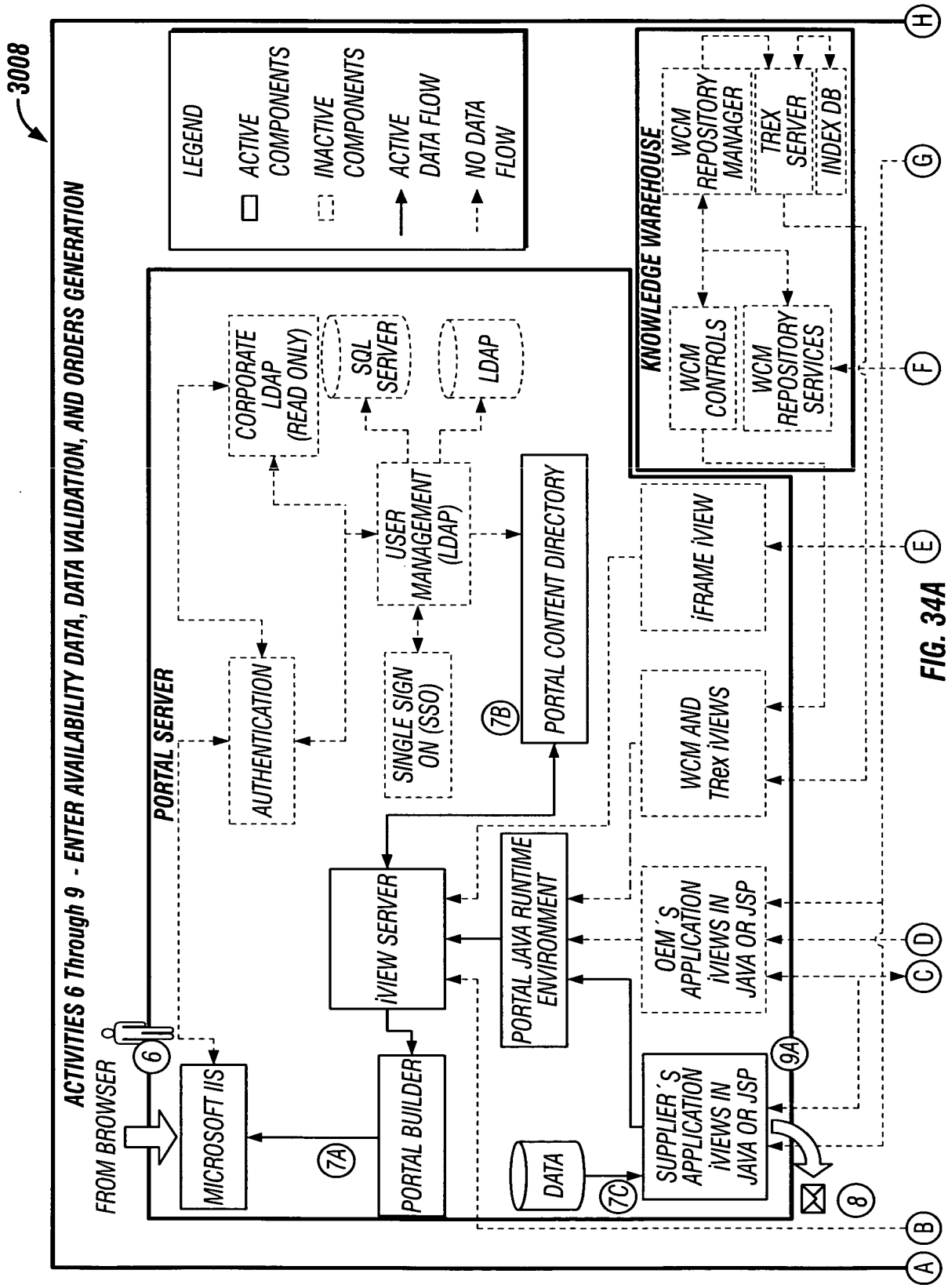
3008
ACTIVITIES 6 Through 9 - ENTER AVAILABILITY DATA, DATA VALIDATION, AND ORDERS GENERATION
LEGEND
ACTIVE COMPONENTS
INACTIVE COMPONENTS
ACTIVE DATA FLOW
NO DATA FLOW
KNOWLEDGE WAREHOUSE
WCM REPOSITORY MANAGER
TREX SERVER
INDEX DB
WCM CONTROLS
WCM REPOSITORY SERVICES
PORTAL SERVER
CORPORATE LDAP (READ ONLY)
SQL SERVER
LDAP
USER MANAGEMENT (LDAP)
PORTAL CONTENT DIRECTORY
iFRAME iVIEW
AUTHENTICATION
SINGLE SIGN ON (SSO)
WCM AND TRex iVIEWS
iVIEW SERVER
PORTAL JAVA RUNTIME ENVIRONMENT
OEM'S APPLICATION iVIEWS IN JAVA OR JSP
FROM BROWSER
MICROSOFT IIS
PORTAL BUILDER
DATA
SUPPLIER'S APPLICATION iVIEWS IN JAVA OR JSP
6
7A
7B
7C
8
9A
A
B
C
D
E
F
G
H

FIG. 34A

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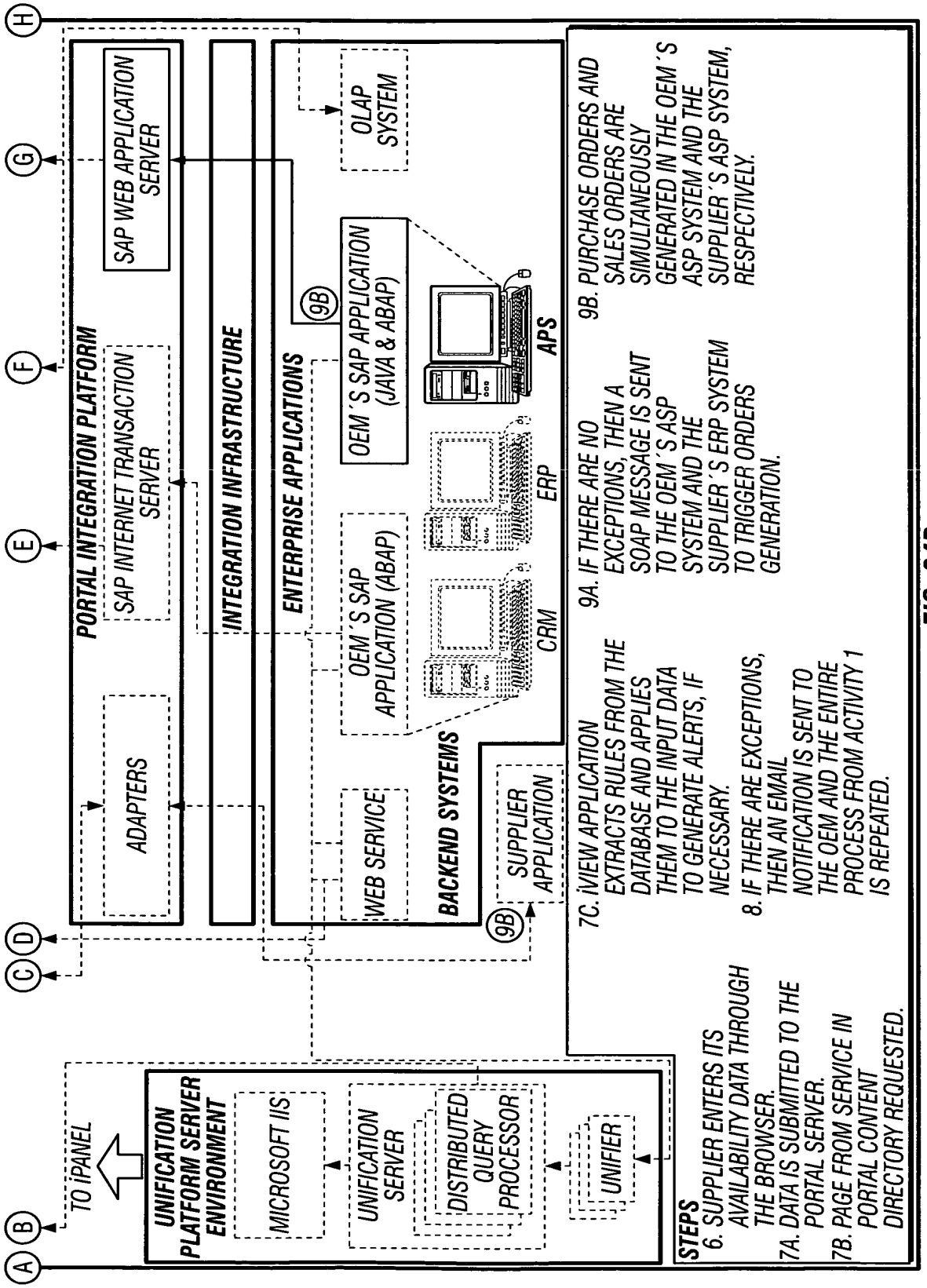
A
B
C
D
E
F
G
H
TO iPANEL
UNIFICATION PLATFORM SERVER ENVIRONMENT
MICROSOFT IIS
UNIFICATION SERVER
DISTRIBUTED QUERY PROCESSOR
UNIFIER
PORTAL INTEGRATION PLATFORM
ADAPTERS
SAP INTERNET TRANSACTION SERVER
SAP WEB APPLICATION SERVER
INTEGRATION INFRASTRUCTURE
ENTERPRISE APPLICATIONS
OEM´S SAP APPLICATION (ABAP)
OEM´S SAP APPLICATION (JAVA & ABAP)
OLAP SYSTEM
BACKEND SYSTEMS
WEB SERVICE
SUPPLIER APPLICATION
CRM
ERP
APS
9B
STEPS
6. SUPPLIER ENTERS ITS AVAILABILITY DATA THROUGH THE BROWSER.
7A. DATA IS SUBMITTED TO THE PORTAL SERVER.
7B. PAGE FROM SERVICE IN PORTAL CONTENT DIRECTORY REQUESTED.
7C. iVIEW APPLICATION EXTRACTS RULES FROM THE DATABASE AND APPLIES THEM TO THE INPUT DATA TO GENERATE ALERTS, IF NECESSARY.
8. IF THERE ARE EXCEPTIONS, THEN AN EMAIL NOTIFICATION IS SENT TO THE OEM AND THE ENTIRE PROCESS FROM ACTIVITY 1 IS REPEATED.
9A. IF THERE ARE NO EXCEPTIONS, THEN A SOAP MESSAGE IS SENT TO THE OEM´S ASP SYSTEM AND THE SUPPLIER´S ERP SYSTEM TO TRIGGER ORDERS GENERATION.
9B. PURCHASE ORDERS AND SALES ORDERS ARE SIMULTANEOUSLY GENERATED IN THE OEM´S ASP SYSTEM AND THE SUPPLIER´S ASP SYSTEM, RESPECTIVELY.

FIG. 34B